

# FEDERAL ITEM IDENTIFICATION GUIDE

## CAPACITOR-RESISTOR

This Reprint replaces FIIG A135, dated October 6, 2007



Commander  
Defense Logistics Information Service  
ATTN: DLIS-K  
74 Washington Avenue North, Suite 7  
Battle Creek, Michigan 49037-3084  
(COMM) (269) 961-5779  
(DSN) 661-5779

This Federal Item Identification Guide for Supply Cataloging is issued under the authority of Department of Defense Instruction 5025.7.

The use of this publication is mandatory for US. Federal Activities participating in Federal Catalog System Operations.

BY ORDER OF THE DIRECTOR

/s/

Commander

Defense Logistics Information Service

## **Table of Contents**

GENERAL INFORMATION .....	1
Index of Master Requirement Codes .....	5
INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG .....	7
APPLICABILITY KEY INDEX .....	8
SECTION I .....	10
SECTION III.....	25
Reply Tables .....	32
Reference Drawing Groups.....	38
Technical Data Tables.....	67
FIIG Change List .....	82

## GENERAL INFORMATION

### 1. Purpose and Scope

This Federal Item Identification Guide (FIIG) is a self-contained document for the collection, coding, transmittal, and retrieval of item characteristics and related supply management data for an item of supply for logistical use. This FIIG is to be used to describe items of supply identified by the index of approved item names appearing in this section.

### 2. Contents

This FIIG is comprised of the following:

- Index of Approved Item Names Covered by this FIIG
- Applicability Key Index
- Section I - Item Characteristics Data Requirements
- Section III - New text that should be here.
- Appendix A - Reply Tables
- Appendix B - Reference Drawing Groups (as applicable)
- Appendix C - Technical Data Tables (as applicable)

#### a. Index of Approved Item Names Covered by this FIIG:

The index lists the approved item names with definitions and item name codes as they appear in Cataloging Handbook H6, applicable to this FIIG. In addition, each name entry is assigned an applicability key for use in relating the characteristics requirements in Section I to the specific item name.

#### b. Applicability Key Index:

The purpose of this index is to provide the user with a ready reference for determining the specific requirements which are applicable to a given approved item name. This index lists all requirements in sequence as they appear in the FIIG. The applicability of a Master Requirement Coded requirement is indicated by the column headed by the specific item name applicability key as follows:

(1) The letter "X" indicates the requirement must be answered for a full descriptive item.

(2) The letters "AR" indicate the requirement is to be answered as required by (1) instructional notes within the FIIG; (2) when the reply is predicated on replies to a related main requirement; or (3) when an asterisk (\*) is used in conjunction with the applicability key column in Section I.

(3) A blank in the column indicates the requirement is not applicable to the specific item name.

c. Section I - Item Characteristics Data Requirements:

This section contains the physical and performance characteristics requirements needed to describe and identify an item of supply. These characteristics differentiate one item from all other items of supply and are to be used to meet the needs of all supported functions. This section is arranged in columns. Identification of each column and instructions pertinent thereto are as follows:

(1) Applicability Key:

The first column shows the applicability key(s) for each requirement. It indicates whether the requirement need be satisfied for the item being identified. "ALL" indicates that the requirement must be answered for all items covered by the FIIG. One or more alphabetic character(s) or group of one or more alphabetic characters indicates a response is required when describing items with an approved item name or names represented by the key(s). An asterisk (\*) used in conjunction with any applicability key indicates that the characteristic stated in the requirement may not be applicable to all items covered by the FIIG.

(2) Master Requirement Codes (MRC):

A four-position code which is assigned to a FIIG requirement for identification of the requirement, cross-referencing requirements in the various sections and appendices of the FIIG, and for mechanized processing and retrieval of FIIG generated data. Absence of a MRC for a requirement indicates a lead-in to requirements with individual MRCs in Appendix B.

(a) The coding technique for providing MULTIPLE/OPTIONAL responses will not be used for a Section I requirement assigned Mode Code A or L that leads to Appendix B sketches with dimensional requirements.

(b) Identified Secondary Address Coding:

This technique is for extending the Master Requirement Code so that a unique address is provided for each application of the requirement in relation to the item and is authorized only as instructed within the requirement. Responses coded through this technique will always consist of the following: (1) Master Requirement Codes, (2) indicator code (a single numeric character determined by the number of positions contained), (3) identified secondary address code (1 to 3-digit alphabetic codes determined by the number of predicted replies), (4) the mode code, (5) the reply code and/or clear text response, and (6) end with a record separator (\*). Steps (1) through (6) are repeated for each application of the requirement.

(c) AND/OR coding:

A technique for extending the Master Requirement Code to provide a distinctive address for multiple responses to the same requirement. Responses coded through this technique will always consist of (1) Master Requirement Code, (2) mode code, (3) the response or reply code (as instructed by the requirement), (4) a single dollar sign (\$) for an OR condition, or a double dollar sign (\$\$) for an AND condition, (5) the mode code, (6) the response or reply code

FIIG A135  
GENERAL INFORMATION

(followed by conditions (4) through (6) for each of the multiple responses) and (7) end with a record separator (\*). NOTE: Apply this technique only when instructed by the requirement sample reply (e.g.).

**(3) Mode Code:**

A one-position alphabetic code that specifies the manner in which a response will be prepared. Each requirement assigned a MRC is also assigned a mode code. Sample replies follow each FIIG requirement displaying the proper construction of a response for the assigned mode code. The response to a requirement will always be prepared in accordance with the assigned mode code and sample reply except in the following instances:

(a) Use of E Mode Code replies is not authorized. If a reply needed to describe an item is not listed in the applicable table, contact the FIIG Initiator.

(b) Mode Code K may not be used for any requirement unless instructed by the requirement instructions.

**(4) Requirement:**

This portion includes the characteristics data elements and data use identifiers required to identify and differentiate one item of supply from another, narrative definitions, and explanations as to use and method of expression. Instructions for coding and preparing replies are also provided.

**(5) Reply Code:**

A code that represents an established authorized reply to a requirement.

**d. Section III - Supplementary Technical and Supply Management Data:**

This section includes those characteristics requirements necessary to support specific logistics functions other than National Stock Number assignment.

**e. Appendix A - Reply Tables:**

Tables of authorized replies to requirements and reply codes when the tables are too lengthy for inclusion in Section I/III, when applicable.

**f. Appendix B - Reference Drawings:**

This appendix contains representative illustrations which portray specific variations of one or more generic characteristics. If reference drawings contain requirements pages to be used in conjunction with illustrations for dimensioning purposes, the requirements pages will contain Master Requirement Codes, mode codes, and a statement of the requirement. A response to requirements on a requirements page is necessary only for those Master Requirement Codes applicable to the illustration selected.

**g. Appendix C - Technical Data Tables:**

FIIG A135  
GENERAL INFORMATION

This appendix contains conversion charts and similar data pertinent to the requirements in Section I/III, when applicable.

3. Enter administrative MRC CLQL immediately following the last FIIG requirement reply, as instructed below:

<u>MRC</u>	<u>Mode</u>	<u>Requirement</u>	<u>Example</u>
	<u>Code</u>		
CLQL	G	COLLOQUIAL NAME (common usage name by which an item is known)	CLQLGWOVEN WIRE CLOTH*

4. Special Instructions and Indicator Definitions

a. Measurements:

Unless otherwise indicated within a requirement example, enter all measurements in decimal form, carried to the nearest three decimal places, with a minimum of one digit preceding the decimal. For SI (metric), enter all measurements with a minimum of one digit before and after the decimal. For fraction to decimal conversion, see Appendix C.

b. Indicators:

A cross hatch (#) following an AIN, MRC, Reply Code or Drawing Number indicates for "ALL EXCEPT USA" use only.

5. Indexes

a. Index of Data Requirements

This index is arranged in alphabetic sequence by Master Requirement Code, cross-referenced to the applicable data requirement and page number(s).

b. Index of Approved Item Names

This index is arranged in alphabetic sequence referenced to Applicability Key.

c. Applicability Key Index

This index is arranged in Applicability Key Sequence.

6. Maintenance

Requests for revisions and other changes will be directed to:

FIIG A135  
GENERAL INFORMATION  
SECTION I/III REQUIREMENTS INDEX

## Index of Master Requirement Codes

NAME.....	10
AEBZ.....	10
CNQR .....	10
CNQS.....	11
CNQT.....	11
CNQW .....	11
CNQX.....	12
CNQY .....	12
CNQZ.....	12
ALPM .....	13
CCFF.....	13
AXGY .....	13
AKPV.....	14
ALBL .....	14
ABTB .....	14
ABTD.....	15
ABKQ .....	16
ABKR .....	16
ABHP.....	17
ABMK .....	17
ABKW .....	18
ADAV .....	19
RADC .....	19
FEAT .....	19
TEST .....	20
SPCL.....	21
ZZZK .....	21
ZZZT.....	22
ZZZW .....	22
ZZZX .....	22
ZZZY .....	23
CRTL .....	23
ELRN .....	23
NHCF.....	24
ELCD .....	24
CXCY .....	25
ABCV .....	25
ADTV .....	25
ADTY .....	25
AFJK.....	26
BBRG.....	26

FIIG A135  
GENERAL INFORMATION  
SECTION I/III REQUIREMENTS INDEX

AFJQ .....	27
AWJN .....	27
AARD .....	27
ABVG .....	28
RADD .....	28
PRMT .....	29
PMWT .....	29
PMLC .....	30
SUPP .....	30
ZZZP .....	30
ZZZV .....	31
AGAV .....	31

FIIG A135  
GENERAL INFORMATION  
INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG

**INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG**

<u>Approved Item Name</u>	<u>INC</u>	<u>App Key</u>
CAPACITOR-RESISTOR	05090	A

An item consisting of one or more capacitors and one or more resistors molded together, housed together in a common case, or mounted on a common board. The individual capacitors and resistors are not separable and the over-all item usually has various design applications; hence, cannot be considered a subassembly. Do not use if more applicable item names, such as FILTER (as modified), or NETWORK (as modified), exist.

FIIG A135  
GENERAL INFORMATION  
APPLICABILITY KEY INDEX

## APPLICABILITY KEY INDEX

<u>A</u>	
NAME	X
AEBZ	X
CNQR	X
CNQS	AR
CNQT	AR
CNQW	AR
CNQX	X
CNQY	AR
CNQZ	AR
ALPM	X
CCFF	X
AXGY	X
AKPV	AR
ALBL	AR
ABTB	AR
ABTD	AR
ABKQ	AR
ABKR	AR
ABHP	X
ABMK	AR
ABKW	AR
ADAV	AR
RADC	AR
FEAT	AR
TEST	AR
SPCL	AR
ZZZK	AR
ZZZT	AR
ZZZW	AR
ZZZX	AR
ZZZY	AR
CRTL	AR
ELRN	AR
NHCF	AR
ELCD	AR
CXCY	AR
ABCV	AR
ADTV	AR
ADTY	AR
AFJK	AR
BBRG	AR
AFJQ	AR
AWJN	AR
AARD	AR
ABVG	AR
RADD	AR
PRMT	AR
PMWT	AR

FIIG A135  
GENERAL INFORMATION  
APPLICABILITY KEY INDEX

PMLC	AR
SUPP	AR
ZZZP	AR
ZZZV	AR
AGAV	AR

## SECTION I

APP Key	MRC	Mode Code	Requirements								
<hr/>											
ALL											
NAME      D      ITEM NAME											
Definition: A NOUN, WITH OR WITHOUT MODIFIERS, BY WHICH AN ITEM OF SUPPLY IS KNOWN.											
Reply Instructions: Enter the applicable Item Name Code from the index appearing in the General Information Section. (e.g., NAMED05090*)											
ALL											
AEBZ      L      SCHEMATIC DIAGRAM DESIGNATOR											
Definition: A DESIGNATOR INDICATING A GRAPHIC REPRESENTATION, IN STANDARD AND ACCEPTED SYMBOLS, OF ESSENTIAL ELECTRICAL-ELECTRONIC ELEMENTS AND RELATED CONNECTIONS ON THE ITEM.											
Reply Instructions: Enter the applicable designator from <a href="#">Appendix B</a> , Reference Drawing Group A. (e.g., AEBZL2*)											
ALL											
CNQR      J      CAPACITANCE VALUE PER FUNCTION											
Definition: THE RELATIVE LEVEL OF THE QUANTITY OF ELECTRICAL CHARGE AT A GIVEN POTENTIAL WHICH THE CAPACITOR IS CAPABLE OF RECEIVING AND STORING PER FUNCTION.											
<i>Reply Instructions: Enter the applicable Reply Code from the table below, the applicable Reply Code from <a href="#">Appendix A</a>, Table 1, followed by the numeric value. Commas are not to be transmitted (entered) in the reply field of the requirement. For multiple replies, use AND/OR coding, entering in Appendix A, Table 1 sequence. (e.g., CNQRJPDJ100.0*; CNQRJUDJ10.0\$\$JUDK10.0*; CNQRJUDJ5.0\$JUDJ10.0*;</i>											
<table> <thead> <tr> <th><u>REPLY CODE</u></th> <th><u>REPLY (AC77)</u></th> </tr> </thead> <tbody> <tr> <td>F</td> <td>FARADS</td> </tr> <tr> <td>U</td> <td>MICROFARADS</td> </tr> <tr> <td>P</td> <td>PICOFARADS</td> </tr> </tbody> </table>				<u>REPLY CODE</u>	<u>REPLY (AC77)</u>	F	FARADS	U	MICROFARADS	P	PICOFARADS
<u>REPLY CODE</u>	<u>REPLY (AC77)</u>										
F	FARADS										
U	MICROFARADS										
P	PICOFARADS										

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
<hr/>			

ALL\*

CNQS      J      CAPACITANCE TOLERANCE PER FUNCTION IN PERCENT

Definition: THE LIMITS OF PERMISSIBLE PERCENT DEVIATION OF CAPACITANCE VALUE PER FUNCTION OF AN ITEM FROM ITS RATED VALUE.

*Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 1, followed by the numeric value. For multiple replies, use AND/OR coding, entering in reply table sequence. (e.g., CNQSJDHM1.0/P1.0\*; CNQSJDJM1.0/P1.0\$\$JDKM2.0/P2.0\*; CNQSJDJM1.0/P1.0\$JDJM2.0/P2.0\*;*

For capacitors whose tolerance is expressed as "Guaranteed Minimum Value" (GMV), citing a positive tolerance, enter zero for the minus tolerance value, followed by the positive tolerance. If a positive tolerance is not cited, enter zero for the minus tolerance value and 100 for the positive tolerance. (e.g., CNQSJDHM0.0/P100.0\*)

NOTE FOR MRCS CNQT AND CNQW: A REPLY MUST BE ENTERED FOR MRC CNQT OR CNQW.

ALL\* (See Note Above)

CNQT      J      DC VOLTAGE RATING PER FUNCTION IN VOLTS

Definition: THE DIRECT CURRENT VOLTAGE PER FUNCTION FOR WHICH THE ITEM IS RATED, EXPRESSED IN VOLTS.

*Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 1, followed by the numeric value. For multiple replies, use AND/OR coding, entering in reply table sequence. (e.g., CNQTJDH150.0\*; CNQTJDJ200.0\$\$JDK150.0\*; CNQTJDJ150.0\$JDJ200.0\*;*

ALL\* (See Note Preceding MRC CNQT)

CNQW      J      AC VOLTAGE RATING PER FUNCTION IN VOLTS

Definition: THE ALTERNATING CURRENT VOLTAGE PER FUNCTION FOR WHICH THE ITEM IS RATED, EXPRESSED IN VOLTS.

*Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 1, followed by the numeric value. For multiple replies, use AND/OR coding, entering in reply table sequence. (e.g., CNQWJDH115.0\*; CNQWJDJ125.0\$\$JDK115.0\*; CNQWJDJ115.0\$JDJ125.0\**

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
<hr/>			

ALL

CNQX J ELECTRICAL RESISTANCE PER FUNCTION

Definition: A MEASURE OF THE OPPOSITION TO THE FLOW OF ELECTRICAL CURRENT PER FUNCTION.

*Reply Instructions: Enter the applicable Reply Code from the table below, the applicable Reply Code from [Appendix A](#), Table 1, followed by the numeric value. Commas are not to be transmitted (entered) in the reply field of the requirement. For multiple replies, use AND/OR coding, entering in Appendix A, Table 1 sequence. (e.g., CNQXJKDY10.0\*; CNQXJKDZ100.0\$\$JKEA4.0\*; CNQXJKDZ100.0\$JKDZ120.0\*;*

<u>REPLY CODE</u>	<u>REPLY (AA57)</u>
G	GIGOHMS
K	KILOHMS
M	MEGOHMS
Q	OHMS

ALL\*

CNQY J RESISTANCE TOLERANCE PER FUNCTION IN PERCENT

Definition: THE PERCENTAGE OF PERMISSIBLE VARIATION IN THE ELECTRICAL RESISTANCE VALUE OF AN ITEM FROM ITS RATED VALUE PER FUNCTION.

*Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 1, followed by the numeric value. For multiple replies, use AND/OR coding, entering in reply table sequence. (e.g., CNQYJDYM5.0/P5.0\*; CNQYJDZM10.0/P10.0\$\$JEAM5.0/P5.0\*; CNQYJDZM5.0/P5.0\$JDZM10.0/P10.0\*;*

To convert tolerance given in ohms to percent, see Appendix C, Table 1, Ohms to Percent Conversion formula.

ALL\*

CNQZ J RESISTOR POWER DISSIPATION RATING PER FUNCTION IN WATTS

Definition: THE MAXIMUM AMOUNT OF ELECTRICAL ENERGY THAT CAN BE EXPENDED BY A RESISTOR PER FUNCTION, EXPRESSED IN WATTS.

APP Key	MRC	Mode Code	Requirements								
<i>Reply Instructions: Enter the applicable Reply Code from <a href="#">Appendix A</a>, Table 1, followed by the numeric value. For multiple replies, use AND/OR coding, entering in reply table sequence. (e.g., CNQZJDY0.125*; CNQZJDZ0.500\$\$JEA0.250*; CNQZJDZ0.250\$JDZ0.500*;</i>											
ALL											
ALPM D ASSEMBLY FORM											
Definition: THE FORM OF ASSEMBLY IN WHICH THE ITEM IS SUPPLIED.											
Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ALPMDBG*; ALPMDBG\$DBH*; ALPMDBG\$\$DBJ*)											
<table> <thead> <tr> <th><u>REPLY CODE</u></th> <th><u>REPLY (AE33)</u></th> </tr> </thead> <tbody> <tr> <td>BJ</td> <td>BOARD MOUNTED</td> </tr> <tr> <td>BH</td> <td>ENCASED</td> </tr> <tr> <td>BG</td> <td>MOLDED TOGETHER (Encapsulated)</td> </tr> </tbody> </table>				<u>REPLY CODE</u>	<u>REPLY (AE33)</u>	BJ	BOARD MOUNTED	BH	ENCASED	BG	MOLDED TOGETHER (Encapsulated)
<u>REPLY CODE</u>	<u>REPLY (AE33)</u>										
BJ	BOARD MOUNTED										
BH	ENCASED										
BG	MOLDED TOGETHER (Encapsulated)										
ALL											
CCFF J		TERMINAL TYPE AND QUANTITY									
Definition: INDICATES THE TYPE AND NUMBER OF TERMINALS FOR PROVIDING ELECTRICAL CONNECTION.											
Reply Instructions: Enter the applicable Reply Code from <a href="#">Appendix A</a> , Table 2, followed by the numeric value. For items having different types of terminals, use AND coding (\$\$), entering in reply table sequence. (e.g., CCFFJAAAB3*; CCFFJAAAB4\$\$JAAAF2*)											
Do not include dummy terminals (see Section III).											
ALL											
AXGY D		MOUNTING METHOD									
Definition: THE MEANS OF ATTACHING THE ITEM.											
Reply Instructions: Enter the applicable Reply Code from <a href="#">Appendix A</a> , Table 3. (e.g., AXGYDAHA*; AXGYDABC\$DABH*; AXGYDAET\$\$DAAC*)											

FIIG A135  
SECTION I

APP Key	Mode MRC	Code	Requirements
------------	-------------	------	--------------

NOTE FOR MRCS AKPV, ALBL, ABTB, AND ABTD: IF REPLY CODE AHF OR AET IS ENTERED FOR MRC AXGY, REPLY TO MRCS AKPV AND ALBL. IF REPLY CODE ACQ IS ENTERED FOR MRC AXGY, REPLY TO MRCS AKPV AND ABTB. IF REPLY CODE ABY IS ENTERED FOR MRC AXGY, REPLY TO MRCS AKPV AND ABTD.

ALL\* (See Note Above)

AKPV      A            MOUNTING FACILITY QUANTITY

Definition: THE NUMBER OF MOUNTING FACILITIES PROVIDED.

Reply Instructions: Enter the numeric value. (e.g., AKPVA4\*)

ALL\* (See Note Preceding MRC AKPV)

ALBL      J            MOUNTING FACILITY THREAD SIZE AND SERIES/TYPE DESIGNATOR

Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE MOUNTING FACILITY.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value of the diameter and the quantity of threads per unit of measure.

(e.g., ALBLJNC0.250-20\*)

If source document indicates the size and threads per specific measurement scale but does not specify thread series, determine the thread series from Appendix C, Table 4.

<u>REPLY CODE</u>	<u>REPLY (AH06)</u>
SM	ISO M
SS	ISO S
UN	UN
NC	UNC
NE	UNEF
NF	UNF
NS	UNS

ALL\* (See Note Preceding MRC AKPV)

ABTB      J            MOUNTING HOLE DIAMETER

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
Definition: THE LENGTH OF A STRAIGHT LINE WHICH PASSES THROUGH THE CENTER OF THE MOUNTING HOLE, AND TERMINATES AT THE CIRCUMFERENCE.			
Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABTBJAA1.000*; ABTBJLA25.4*)			
When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABTBJAB2.495\$\$JAC2.503*)			

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
A	INCHES
L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL\* (See Note Preceding MRC AKPV)

ABTD        J            MOUNTING SLOT WIDTH

Definition: A MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF THE MOUNTING SLOT, IN DISTINCTION FROM THICKNESS.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABTDJAA1.000\*; ABTDJLA25.4\*)

When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABTDJAB2.495\$\$JAC2.503\*)

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
A	INCHES
L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
------------	-----	--------------	--------------

ALL\*

ABKQ      J      CENTER TO CENTER DISTANCE BETWEEN  
MOUNTING FACILITIES PARALLEL TO LENGTH

Definition: THE DISTANCE BETWEEN THE CENTER OF ONE MOUNTING FACILITY AND THE CENTER OF THE ADJACENT MOUNTING FACILITY PARALLEL TO THE LENGTH.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABKQJAA1.000\*; ABKQJLA25.4\*)

When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABKQJAB2.495\$\$JAC2.503\*)

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
A	INCHES
L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL\*

ABKR      J      CENTER TO CENTER DISTANCE BETWEEN  
MOUNTING FACILITIES PARALLEL TO WIDTH

Definition: THE DISTANCE BETWEEN THE CENTER OF ONE MOUNTING FACILITY AND THE CENTER OF THE ADJACENT MOUNTING FACILITY PARALLEL TO THE WIDTH.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABKRJAA1.000\*; ABKRJLA25.4\*)

When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABKRJAB2.495\$\$JAC2.503\*)

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
-------------------	---------------------

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
		A	INCHES
		L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

NOTE FOR MRCS ABHP, ABMK, ABKW, AND ADAV: WHEN REPLYING TO MRC ABHP, ABMK, ABKW, AND ADAV, GIVE THE OVERALL DIMENSION, EXCLUDING THE TERMINALS.

ALL (See Note Above)

ABHP      J            OVERALL LENGTH

Definition: THE DIMENSION MEASURED ALONG THE LONGITUDINAL AXIS WITH TERMINATED POINTS AT THE EXTREME ENDS OF THE ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABHPJAA1.000\*; ABHPJLA25.4\*)

When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABHPJAB2.495\$\$JAC2.503\*)

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
A	INCHES
L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL\* (See Note Preceding MRC ABHP)

ABMK      J            OVERALL WIDTH

Definition: AN OVERALL MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF AN ITEM, IN DISTINCTION FROM THICKNESS.

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
------------	-----	--------------	--------------

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABMKJAA1.000\*; ABMKJLA25.4\*)

When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABMKJAB2.495\$\$JAC2.503\*)

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
A	INCHES
L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL\* (See Note Preceding MRC ABHP)

ABKW J OVERALL HEIGHT

Definition: THE DISTANCE MEASURED IN A STRAIGHT LINE FROM THE BOTTOM TO TOP OF AN ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABKWJAA1.000\*; ABKWJLA25.4\*)

When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABKWJAB2.495\$\$JAC2.503\*)

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
A	INCHES
L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL\* (See Note Preceding MRC ABHP)

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
	ADAV	J	OVERALL DIAMETER

Definition: A MEASUREMENT OF THE LONGEST STRAIGHT LINE ACROSS A CIRCULAR CROSS-SECTIONAL PLANE.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADAVJAA1.000\*; ADAVJLA25.4\*)

When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ADAVJAB2.495\$\$JAC2.503\*)

Table 1

<u>REPLY CODE</u>	<u>REPLY (AA05)</u>
A	INCHES
L	MILLIMETERS

Table 2

<u>REPLY CODE</u>	<u>REPLY (AC20)</u>
A	NOMINAL
B	MINIMUM
C	MAXIMUM

NOTE FOR MRC RADC: REPLY TO MRC RADC ONLY WHEN THE ITEM CONTAINS RADIOACTIVE MATERIAL. IF MRC RADC IS ANSWERED, A REPLY TO MRC RADD IS MANDATORY.

ALL\* (See Note Above)

RADC	D	RADIOACTIVE CONTENT
------	---	---------------------

Definition: AN INDICATION OF WHETHER OR NOT THE ITEM CONTAINS RADIOACTIVE MATERIALS.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., RADCDP\*)

<u>REPLY CODE</u>	<u>REPLY (AN54)</u>
P	CONTAINS RADIOACTIVE MATERIAL

ALL\*

FEAT	G	SPECIAL FEATURES
------	---	------------------

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements								
Definition: THOSE UNUSUAL OR UNIQUE CHARACTERISTICS OR QUALITIES OF AN ITEM NOT COVERED IN THE OTHER REQUIREMENTS AND WHICH ARE DETERMINED TO BE ESSENTIAL FOR IDENTIFICATION.											
Reply Instructions: Enter the reply in clear text. Separate multiple replies with a semicolon. (e.g., FEATGADJUSTABLE NOSE CLIP*; FEATGADJUSTABLE NOSE PIECE; DISPOSABLE*)											
ALL*											
<p>TEST            J            TEST DATA DOCUMENT</p> <p>Definition: THE SPECIFICATION, STANDARD, DRAWING, OR SIMILAR INSTRUMENT THAT SPECIFIES ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS OR TEST CONDITIONS UNDER WHICH AN ITEM IS TESTED AND ESTABLISHES ACCEPTABLE LIMITS WITHIN WHICH THE ITEM MUST CONFORM IDENTIFIED BY AN ALPHABETIC AND/OR NUMERIC REFERENCE NUMBER. INCLUDES THE COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE OF THE ENTITY CONTROLLING THE INSTRUMENT.</p> <p>Reply Instructions: Enter the applicable Reply Code from the table below, followed by the 5-position CAGE Code, a dash, and the document identification number.</p> <p>(e.g., TESTJA12345-CWX654321*;      TESTJA1234A-654321\$\$JB5556A-663654*;      TESTJAA2345-654321\$JB55566-663654*)</p> <table> <thead> <tr> <th><u>REPLY CODE</u></th> <th><u>REPLY (AC28)</u></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>SPECIFICATION (Includes engineering type bulletins, brochures, etc., that reflect specification type data in specification format; excludes commercial catalogs, industry directories, and similar trade publications, reflecting general type data on certain environmental and performance requirements and test conditions that are shown as "typical," "average," "nominal," etc.)</td> </tr> <tr> <td>B</td> <td>STANDARD (Includes industry or association standards, individual manufacturer standards, etc.)</td> </tr> <tr> <td>C</td> <td>DRAWING (This is the basic governing drawing, such as a contractor drawing, original equipment manufacturer drawing, etc.; excludes any specification, standard, or other document that may be referenced in a basic governing drawing)</td> </tr> </tbody> </table>				<u>REPLY CODE</u>	<u>REPLY (AC28)</u>	A	SPECIFICATION (Includes engineering type bulletins, brochures, etc., that reflect specification type data in specification format; excludes commercial catalogs, industry directories, and similar trade publications, reflecting general type data on certain environmental and performance requirements and test conditions that are shown as "typical," "average," "nominal," etc.)	B	STANDARD (Includes industry or association standards, individual manufacturer standards, etc.)	C	DRAWING (This is the basic governing drawing, such as a contractor drawing, original equipment manufacturer drawing, etc.; excludes any specification, standard, or other document that may be referenced in a basic governing drawing)
<u>REPLY CODE</u>	<u>REPLY (AC28)</u>										
A	SPECIFICATION (Includes engineering type bulletins, brochures, etc., that reflect specification type data in specification format; excludes commercial catalogs, industry directories, and similar trade publications, reflecting general type data on certain environmental and performance requirements and test conditions that are shown as "typical," "average," "nominal," etc.)										
B	STANDARD (Includes industry or association standards, individual manufacturer standards, etc.)										
C	DRAWING (This is the basic governing drawing, such as a contractor drawing, original equipment manufacturer drawing, etc.; excludes any specification, standard, or other document that may be referenced in a basic governing drawing)										

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
------------	-----	--------------	--------------

---

ALL\*

SPCL G SPECIAL TEST FEATURES

Definition: TEST CONDITIONS AND RATINGS, OR ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS THAT ARE DIFFERENT, MORE CRITICAL, OR MORE SPECIFIC THAN THOSE SPECIFIED IN A GOVERNING TEST DATA DOCUMENT.

Reply Instructions: Enter the reply in clear text. (e.g., SPCLGSELECTED AND TESTED FOR NAVIGATIONAL SYSTEMS\*)

ALL\*

ZZZK J SPECIFICATION/STANDARD DATA

Definition: THE DOCUMENT DESIGNATOR OF THE SPECIFICATION OR STANDARD WHICH ESTABLISHED THE ITEM OF SUPPLY.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the Commercial and Government Entity (CAGE) Code of the entity controlling the document, a dash, and the document designator. The agency that controls the limited coordination document must be preceded and followed by a slash following the designator. The word canceled or superseded must be preceded and followed by a slash for the designator. Professional and industrial association specifications/standards are differentiated from a manufacturer's specification in that the data has been coordinated and published by the professional and industrial association. Include amendments and revisions where applicable.

(e.g., ZZZKJT81337-30642B\*;

ZZZKJS81349-MIL-D-180 REV1/CANCELED/\*;

ZZZKJP80205-NAS1103\*;

ZZZKJS81349-MIL-C-1140C/CE/\*;

ZZZKJT81337-30642B\$\$JP80205-NAS1103\*)

<u>REPLY CODE</u>	<u>REPLY (AN62)</u>
S	GOVERNMENT SPECIFICATION
T	GOVERNMENT STANDARD

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
	D	MANUFACTURERS SOURCE CONTROL	
	R	MANUFACTURERS SPECIFICATION	
	N	MANUFACTURERS SPECIFICATION CONTROL	
	M	MANUFACTURERS STANDARD	
	B	NATIONAL STD/SPEC	
	A	PROFESSIONAL/INDUSTRIAL ASSOCIATION SPECIFICATION	
	P	PROFESSIONAL/INDUSTRIAL ASSOCIATION STANDARD	

NOTE FOR MRC ZZZT: IF THE SPECIFICATION/STANDARD CITED IN REPLY TO MRC ZZZK IS NONDEFINITIVE, REPLY TO MRC ZZZT. THIS REPLY IS THE DATA WHICH IS NOT RECORDED IN SEGMENT C.

ALL\* (See Note Above)

ZZZT        J            NONDEFINITIVE SPEC/STD DATA

Definition: THE NUMBER, LETTER, OR SYMBOL THAT INDICATES THE TYPE, STYLE, GRADE, CLASS, AND THE LIKE, OF AN ITEM IN A NONIDENTIFYING SPECIFICATION OR STANDARD.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 4, followed by the appropriate number, letter, or symbol. (e.g., ZZZTJTY1\*; ZZZTJTY1\$\$JSTA\*; ZZZTJTY1\$JSTA\*)

ALL\*

ZZZW        G            DEPARTURE FROM CITED DOCUMENT

Definition: THE TECHNICAL DIFFERENTIATING CHARACTERISTIC(S) OF AN ITEM OF SUPPLY WHICH DEPART(S) FROM THE TEXT OF A SPECIFICATION OR A STANDARD IN THAT IT REPRESENTS A SELECTION OF CHARACTERISTICS STATED IN THE SPECIFICATION OR STANDARD AS BEING OPTIONAL, OR A VARIATION FROM ONE OR MORE OF THE STATED CHARACTERISTICS, OR AN ADDITIONAL CHARACTERISTIC NOT STATED IN THE SPECIFICATION OR STANDARD.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZWGAS MODIFIED BY MATERIAL\*)

ALL\*

ZZZX        G            DEPARTURE FROM CITED DESIGNATOR

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
Definition: THE VARIATION WHEN THE ITEM IS IN CONFORMITY WITH A TYPE DESIGNATOR COVERED BY A SPECIFICATION OR STANDARD, EXCEPT IN REGARD TO ONE OR MORE TECHNICAL DIFFERENTIATING CHARACTERISTICS.			
Reply Instructions: Enter the reply in clear text. (e.g., ZZZXGAS MODIFIED BY MATERIAL*)			
ALL*			
ZZZY	G		REFERENCE NUMBER DIFFERENTIATING CHARACTERISTICS
Definition: A FEATURE OF THE ITEM OF SUPPLY WHICH MUST BE SPECIFICALLY RECORDED WHEN THE REFERENCE NUMBER COVERS A RANGE OF ITEMS.			
Reply Instructions: Enter the reply in clear text. (e.g., ZZZYGCOLOR CODED LEADS*; ZZZYGAS DIFFERENTIATED BY MATERIAL*)			
ALL*			
CRTL	A		CRITICALITY CODE JUSTIFICATION
Definition: THE MASTER REQUIREMENT CODES OF THOSE REQUIREMENTS WHICH ARE TECHNICALLY CRITICAL BY REASON OF TOLERANCE, FIT, PERFORMANCE, OR OTHER CHARACTERISTICS WHICH AFFECT IDENTIFICATION OF THE ITEM.			
Reply Instructions: Enter the Master Requirement Code for the requirement, the reply to which renders the item as being critical. (e.g., CRTLAMATL*; CRTLAMATL\$\$ASURF*)			
Reply to this requirement only if the header record for the item identification for the item being identified has been coded as critical.			
ALL*			
ELRN	G		EXTRA LONG REFERENCE NUMBER
Definition: A REFERENCE NUMBER EXCEEDING 32 POSITIONS.			

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
Reply Instructions: Enter the entire reference number. Do not include the 5-position Commercial and Government Entity (CAGE) Code unless there is more than one extra long reference number on the NSN, (e.g., ELRNGANN112036BIL060557LEN313605UZ62365*).			
If there is more than one extra long reference number on the NSN, include the CAGE or NCAGE and separate each reference by using the "&" character, (e.g., 28480 ANN112036BIL060557LEN313605UZ62365 & S1234 NN112036BIL060557LEN313605UZ62365).			
In determining quantity of characters in the reference number, count will be made after modification in accordance with Volume 2, Chapter 9, FLIS Procedures Manual, DoD 4100.39-M.			

NOTE FOR MRC NHCF: IF THE CRITICALITY CODE IS E, H, OR M, REPLY TO MRC NHCF.

ALL\* (See Note Above)

NHCF      D      NUCLEAR HARDNESS CRITICAL FEATURE

Definition: AN INDICATION OF THE NUCLEAR HARDNESS CRITICALITY OF THE ITEM.

Reply Instructions: Enter the Reply Code from the table below. (e.g., NHCFDCY\*)

<u>REPLY CODE</u>	<u>REPLY (AD05)</u>
CY	HARDENED

ALL\*

ELCD      D      EXTRA LONG CHARACTERISTIC DESCRIPTION

Definition: A DESCRIPTION THAT EXCEEDS 5000 CHARACTERS.

Reply Instructions: Enter the Reply Code from the table below. (e.g., ELCDDA\*)

<u>REPLY CODE</u>	<u>REPLY (AN58)</u>
A	ADDITIONAL DESCRIPTIVE DATA ON MANUAL RECORD

APP Key	MRC	Mode Code	Requirements
<hr/>			

ALL\*

CXY G PART NAME ASSIGNED BY CONTROLLING AGENCY

Definition: THE NAME ASSIGNED TO THE ITEM BY THE GOVERNMENT AGENCY OR COMMERCIAL ORGANIZATION CONTROLLING THE DESIGN OF THE ITEM.

Reply Instructions: Enter the reply in clear text. (e.g., CXYGLINE PROCESSOR CONTROL BOARD\*)

### SECTION III

APP Key	MRC	Mode Code	Requirements
<hr/>			

ALL

ABCV D BOARD MATERIAL

Definition: THE ELEMENTS, COMPOUND, OR MIXTURE OF WHICH THE BOARD IS FABRICATED.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 5. (e.g., ABCVDPCAAZ0\*)

ALL

ADTV D CASE MATERIAL

Definition: THE ELEMENT, COMPOUND, OR MIXTURE OF WHICH THE CASE IS FABRICATED, EXCLUDING ANY SURFACE TREATMENT.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 5. (e.g., ADTVDME0000\*; ADTVDALC000\$\$DBR0000\*; ADTVDPC0000\$DPCW000\*)

ALL

ADTY D CASE SURFACE TREATMENT

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
Definition: CONSISTS OF PLATING, DIP, AND/OR COATING THAT CANNOT BE WIPE OFF. PLATING AND/OR COATING IS ANY CHEMICAL AND/OR METALLIC ADDITIVE, ELECTROCHEMICAL, OR MILD MECHANICAL PROCESS WHICH PROTECTS THE SURFACE OF THE CASE.			
Reply Instructions: Enter the applicable Reply Code from <a href="#">Appendix A</a> , Table 6. (e.g., ADTYDEN0000*; ADTYDSNF000\$\$DAGE000*; ADTYDEN000\$DLQ0000*)			
ALL			
AFJK	J		CUBIC MEASURE
Definition: A MEASUREMENT OF VOLUME TAKEN BY MULTIPLYING THE LENGTH BY THE WIDTH BY THE HEIGHT OF AN ITEM AND RENDERED IN CUBIC UNITS.			
Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AFJKJB2.0*)			
<u>REPLY CODE</u>		<u>REPLY (AD42)</u>	
C		CUBIC CENTIMETERS	
D		CUBIC DECIMETERS	
F		CUBIC FEET	
B		CUBIC INCHES	
E		CUBIC METERS	
ALL			
BBRG	D		STORAGE TYPE
Definition: INDICATES THE TYPE OF STORAGE SPACE REQUIRED FOR AN ITEM IN ORDER TO PROVIDE THE DEGREE OF PROTECTION NECESSARY TO MAINTAIN SERVICEABILITY STANDARDS.			
Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BBRGDAC*; BBRGDAN\$DAD*)			
<u>REPLY CODE</u>		<u>REPLY (AM81)</u>	
AC		CLOSED SHED	
AD		CONTROLLED HUMIDITY WAREHOUSE	
AM		DEHUMIDIFIED WAREHOUSE	
AE		GENERAL PURPOSE WAREHOUSE	
AN		HEATED WAREHOUSE	
AH		OPEN SHED	

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
	AJ		UNHEATED WAREHOUSE

ALL

AFJQ            J            STORAGE TEMP RANGE

Definition: THE MINIMUM AND MAXIMUM TEMPERATURES AT WHICH AN ITEM CAN BE STORED WITHOUT DETRIMENTAL EFFECT.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the temperature range. (e.g., AFJQJFM32.0/P50.0\*)

<u>REPLY CODE</u>	<u>REPLY (AB36)</u>
C	DEG CELSIUS
F	DEG FAHRENHEIT

ALL

AWJN            J            UNPACKAGED UNIT WEIGHT

Definition: THE MEASURED WEIGHT OF AN ITEM UNENCUMBERED BY PACKAGING OR PACKING MATERIAL.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. Commas are not to be transmitted (entered) in the reply field of the requirement. (e.g., AWJNJAS1.250\*)

For items indicating pounds and ounces, see Appendix C, Table 5 for conversion.

<u>REPLY CODE</u>	<u>REPLY (AG67)</u>
BA	GRAMS
AJ	KILOGRAMS
AN	OUNCES
AS	POUNDS

ALL

AARD            A            DUMMY TERMINAL QUANTITY

Definition: THE NUMBER OF TERMINALS THAT DO NOT PROVIDE ELECTRICAL CONNECTION TO THE ITEM.

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
Reply Instructions: Enter the numeric value. (e.g., AARDA2*)			
ALL			
ABVG J MOUNTING SLOT LENGTH			
Definition: A MEASUREMENT OF THE LONGEST DIMENSION OF THE MOUNTING SLOT, IN DISTINCTION FROM WIDTH.			
Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABVGJAA1.000*; ABVGJLA25.4*)			
When the source document specifies a tolerance or range, use AND coding (\$\$), entering the minimum value first. (e.g., ABVGJAB2.495\$\$JAC2.503*)			
<u>Table 1</u>			
<u>REPLY CODE</u>			
A			<u>REPLY (AA05)</u>
L			INCHES
			MILLIMETERS
<u>Table 2</u>			
<u>REPLY CODE</u>			
A			<u>REPLY (AC20)</u>
B			NOMINAL
C			MINIMUM
			MAXIMUM
NOTE FOR MRC RADD: IF REPLY CODE P WAS ENTERED FOR MRC RADC IN SECTION I, A REPLY MUST BE ENTERED FOR MRC RADD.			
ALL (See Note Above)			
RADD	J		RADIONUCLIDES DATA
Definition: THE NAME AND AMOUNT OF THE RADIONUCLIDE.			
Reply Instructions: Enter the applicable Reply Codes from the table below and <a href="#">Appendix A</a> , Table 7, followed by the numeric value. Where radioactivity varies from one sample to another, enter the maximum value. (e.g., RADDJJFAAY10.000*)			
<u>REPLY CODE</u>			
JF			<u>REPLY (AG67)</u>
JH			CURIES
JG			MICROCURIES
			MILLICURIES

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements																		
<hr/>																					
ALL																					
<hr/>																					
PRMT	D		PRECIOUS MATERIAL																		
Definition: IDENTIFICATION OF THE PRECIOUS MATERIAL CONTAINED IN THE ITEM.																					
Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., PRMTDAGA000*; PRMTDAUA000\$\$DAGA000*; PRMTDAUA000\$DAGA000*)																					
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;"><u>REPLY CODE</u></th> <th style="text-align: left; width: 70%;"><u>REPLY (MA01)</u></th> </tr> </thead> <tbody> <tr> <td>AUA000</td> <td>GOLD</td> </tr> <tr> <td>IRA000</td> <td>IRIDIUM</td> </tr> <tr> <td>AZA000</td> <td>OSMIUM</td> </tr> <tr> <td>PDA000</td> <td>PALLADIUM</td> </tr> <tr> <td>PTA000</td> <td>PLATINUM</td> </tr> <tr> <td>RHA000</td> <td>RHODIUM</td> </tr> <tr> <td>RTA000</td> <td>RUTHENIUM</td> </tr> <tr> <td>AGA000</td> <td>SILVER</td> </tr> </tbody> </table>				<u>REPLY CODE</u>	<u>REPLY (MA01)</u>	AUA000	GOLD	IRA000	IRIDIUM	AZA000	OSMIUM	PDA000	PALLADIUM	PTA000	PLATINUM	RHA000	RHODIUM	RTA000	RUTHENIUM	AGA000	SILVER
<u>REPLY CODE</u>	<u>REPLY (MA01)</u>																				
AUA000	GOLD																				
IRA000	IRIDIUM																				
AZA000	OSMIUM																				
PDA000	PALLADIUM																				
PTA000	PLATINUM																				
RHA000	RHODIUM																				
RTA000	RUTHENIUM																				
AGA000	SILVER																				

ALL	PMWT	J	PRECIOUS MATERIAL AND WEIGHT																		
<hr/>																					
Definition: AN INDICATION OF THE PRECIOUS MATERIAL CONTAINED IN THE ITEM, AND THE AMOUNT PER A MEASUREMENT SCALE.																					
Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. Enter multiple replies in Table 1 sequence. (e.g., PMWTJPTA000R0.780*; PMWTJAUA000F0.500\$\$JAGA000R0.780*; PMWTJAUA000F0.500\$JAGA000R0.780*)																					
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;"><u>Table 1</u> <u>REPLY CODE</u></th> <th style="text-align: left; width: 70%;"><u>REPLY (MA01)</u></th> </tr> </thead> <tbody> <tr> <td>AUA000</td> <td>GOLD</td> </tr> <tr> <td>IRA000</td> <td>IRIDIUM</td> </tr> <tr> <td>AZA000</td> <td>OSMIUM</td> </tr> <tr> <td>PDA000</td> <td>PALLADIUM</td> </tr> <tr> <td>PTA000</td> <td>PLATINUM</td> </tr> <tr> <td>RHA000</td> <td>RHODIUM</td> </tr> <tr> <td>RTA000</td> <td>RUTHENIUM</td> </tr> <tr> <td>AGA000</td> <td>SILVER</td> </tr> </tbody> </table>				<u>Table 1</u> <u>REPLY CODE</u>	<u>REPLY (MA01)</u>	AUA000	GOLD	IRA000	IRIDIUM	AZA000	OSMIUM	PDA000	PALLADIUM	PTA000	PLATINUM	RHA000	RHODIUM	RTA000	RUTHENIUM	AGA000	SILVER
<u>Table 1</u> <u>REPLY CODE</u>	<u>REPLY (MA01)</u>																				
AUA000	GOLD																				
IRA000	IRIDIUM																				
AZA000	OSMIUM																				
PDA000	PALLADIUM																				
PTA000	PLATINUM																				
RHA000	RHODIUM																				
RTA000	RUTHENIUM																				
AGA000	SILVER																				
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;"><u>Table 2</u> <u>REPLY CODE</u></th> <th style="text-align: left; width: 70%;"><u>REPLY (AG14)</u></th> </tr> </thead> </table>				<u>Table 2</u> <u>REPLY CODE</u>	<u>REPLY (AG14)</u>																
<u>Table 2</u> <u>REPLY CODE</u>	<u>REPLY (AG14)</u>																				

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
	E		GRAINS, TROY
	R		GRAMS
	F		OUNCES, TROY

ALL

PMLC            J            PRECIOUS MATERIAL AND LOCATION

Definition: AN INDICATION OF THE PRECIOUS MATERIAL AND ITS LOCATION IN THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the location in clear text. (e.g., PMLCJAU000TERMINALS\*;  
PMLCJAU000TERMINALS\$\$JAGA000INTERNAL SURFACES\*;  
PMLCJAU000TERMINALS\$JAGA000INTERNAL SURFACES\*)

<u>REPLY CODE</u>	<u>REPLY (MA01)</u>
AUA000	GOLD
IRA000	IRIDIUM
AZA000	OSMIUM
PDA000	PALLADIUM
PTA000	PLATINUM
RHA000	RHODIUM
RTA000	RUTHENIUM
AGA000	SILVER

ALL

SUPP            G            SUPPLEMENTARY FEATURES

Definition: CHARACTERISTICS OR QUALITIES OF AN ITEM, NOT COVERED IN ANY OTHER REQUIREMENT, WHICH ARE CONSIDERED ESSENTIAL INFORMATION FOR ONE OR MORE FUNCTIONS EXCLUDING NSN ASSIGNMENT.

Reply Instructions: Enter the reply in clear text. (e.g., SUPPGMAY INCL HOLE IN UPPER SUPPORT FOR MTG DURING SHIPMENT\*)

ALL

ZZZP            J            PURCHASE DESCRIPTION IDENTIFICATION

FIIG A135  
SECTION I

APP Key	MRC	Mode Code	Requirements
Definition: THE CONTROLLING ACTIVITY AND IDENTIFICATION OF A DOCUMENT USED IN LIEU OF A SPECIFICATION IN THE PROCUREMENT OF AN ITEM OF SUPPLY.			
Reply Instructions: Enter the 5-position Commercial and Government Entity (CAGE) code, followed by a dash and the identifying number of the document.			
(e.g., ZZZPJ81337-30624A*)			
ALL			
ZZZV	G		FSC APPLICATION DATA
Definition: THE JUSTIFICATION FOR THE ASSIGNMENT OF A FEDERAL SUPPLY CLASS (FSC) TO AN ITEM BASED ON THE CLASSIFICATION OF THE NEXT HIGHER CLASSIFIABLE ASSEMBLY.			
Reply Instructions: Enter the name of the next higher classifiable assembly in clear text. (e.g., ZZZVGMD-53/APS-20 MODULATOR*)			
ALL			
AGAV	G		END ITEM IDENTIFICATION
Definition: THE NATIONAL STOCK NUMBER OR THE IDENTIFICATION INFORMATION OF THE END EQUIPMENT FOR WHICH THE ITEM IS A PART.			
Reply Instructions: Enter the applicable reply in clear text.			
(e.g., AGAVG3930-00-000-0000*; AGAVGFORKLIFT TRUCK, SMITH CORPORATION, MODEL 12, TYPE A*)			

## Reply Tables

Table 1 - COMPONENT REFERENCE CHART.....	32
Table 2 - TERMINAL TYPES .....	33
Table 3 - MOUNTING METHODS .....	33
Table 4 - NONDEFINITIVE SPEC/STD DATA.....	34
Table 5 - MATERIALS .....	36
Table 6 - SURFACE TREATMENTS.....	36
Table 7 - LIST OF RADIONUCLIDES .....	37

Table 1 - COMPONENT REFERENCE CHART  
COMPONENT REFERENCE CHART

<u>REPLY CODE</u>	<u>REPLY (AH19)</u>
DH	ALL CAPACITORS
DY	ALL RESISTORS
DJ	CAPACITOR C1
DK	CAPACITOR C2
DL	CAPACITOR C3
DM	CAPACITOR C4
DN	CAPACITOR C5
DP	CAPACITOR C6
DQ	CAPACITOR C7
DR	CAPACITOR C8
DS	CAPACITOR C9
DT	CAPACITOR C10
DW	CAPACITOR C11
DX	CAPACITOR C12
FQ	CAPACITOR C13
DZ	RESISTOR R1
EA	RESISTOR R2
EB	RESISTOR R3
EC	RESISTOR R4
ED	RESISTOR R5
EE	RESISTOR R6
EF	RESISTOR R7
EG	RESISTOR R8
EH	RESISTOR R9
EJ	RESISTOR R10
EK	RESISTOR R11
EL	RESISTOR R12
ES	RESISTOR R13
ET	RESISTOR R14

<u>REPLY CODE</u>	<u>REPLY (AH19)</u>
EW	RESISTOR R15
EX	RESISTOR R16
EY	RESISTOR R17
EZ	RESISTOR R18
FA	RESISTOR R19
FB	RESISTOR R20
FC	RESISTOR R21
FD	RESISTOR R22
FE	RESISTOR R23
FF	RESISTOR R24
FG	RESISTOR R25
FH	RESISTOR R26
FJ	RESISTOR R27
FK	RESISTOR R28

Table 2 - TERMINAL TYPES  
TERMINAL TYPES

<u>REPLY CODE</u>	<u>REPLY (AA58)</u>
A	ANY ACCEPTABLE (do not use for MRC CCFF)
AAAT	BANANA PLUG
AAAC	BOLT
AABB	CLIP
AAAZ	CONNECTOR PLUG
AABD	CONNECTOR RECEPTACLE
AAAY	EYELET
AADM	EYELET W/TAB
AADN	EYELET W/WIRE LEAD
AABA	FEEDTHRU
AABE	FERRULE CLIP
AAAB	PIN
AACH	SCREW
AAAF	SOLDER STUD
AADJ	STANDARD TUBE BASE
AABX	STANDOFF, SOLDER LUG
AADP	TAB
AADQ	TAB W/WIRE LEAD
AACB	THREADED HOLE
AAAD	THREADED STUD
AAAC	TURRET
AAAJ	WIRE HOOK
AACY	WIRE LEAD

Table 3 - MOUNTING METHODS  
MOUNTING METHODS

FIIG A135  
APPENDIX A

<u>REPLY CODE</u>	<u>REPLY (AM39)</u>
ABC	BRACKET
ABH	CLAMP
AEC	CLINCH NUT
AFQ	CONNECTOR
AZJ	INSERT
ABP	PLUG-IN
BLE	POST
ABW	SCREW
ABY	SLOT
AEF	SOCKET
AHA	SOLDER
ACD	TERMINAL
AHF	THREADED HOLE
AET	THREADED STUD
APN	TUBE BASE
ACQ	UNTHREADED HOLE

Table 4 - NONDEFINITIVE SPEC/STD DATA  
NONDEFINITIVE SPEC/STD DATA

<u>REPLY CODE</u>	<u>REPLY (AD08)</u>
AL	ALLOY
AN	ANNEX
AP	APPENDIX
AC	APPLICABILITY CLASS
AR	ARRANGEMENT
AS	ASSEMBLY
AB	ASSORTMENT
BX	BOX
CY	CAPACITY
CA	CASE
CT	CATEGORY
CL	CLASS
CE	CODE
CR	COLOR
CC	COMBINATION CODE
CN	COMPONENT
CP	COMPOSITION
CM	COMPOUND
CD	CONDITION
CS	CONSTRUCTION
DE	DESIGN
DG	DESIGNATOR
DW	DRAWING NUMBER
EG	EDGE
EN	END
FY	FAMILY

FIIG A135  
APPENDIX A

<u>REPLY CODE</u>	<u>REPLY (AD08)</u>
FG	FIGURE
FN	FINISH
FM	FORM
FA	FORMULA
GR	GRADE
GP	GROUP
BA	IMAGE COLOR
NS	INSERT
TM	ITEM
KD	KIND
KT	KIT
LG	LENGTH
LT	LIMIT
MK	MARK
AA	MARKER
ML	MATERIAL
BB	MAXIMUM DENSITY
MH	MESH
ME	METHOD
BC	MINIMUM DENSITY
MD	MODEL
MT	MOUNTING
NR	NUMBER
PT	PART
PN	PATTERN
PC	PHYSICAL CONDITION
PS	PIECE
PL	PLAN
PR	POINT
QA	QUALITY
RN	RANGE
RT	RATING
RF	REFERENCE NUMBER
SC	SCHEDULE
SB	SECTION
SL	SELECTION
SE	SERIES
SV	SERVICE
SX	SET
SA	SHADE
SH	SHAPE
SG	SHEET
SZ	SIZE
PZ	SPECIES
SQ	SPECIFICATION SHEET
SD	SPEED
ST	STYLE
SS	SUBCLASS

FIIG A135  
APPENDIX A

<u>REPLY CODE</u>	<u>REPLY (AD08)</u>
SF	SUBFORM
SP	SUBTYPE
SN	SURFACE CONDITION
SY	SYMBOL
SM	SYSTEM
TB	TABLE
TN	TANNAGE
TP	TEMPER
TX	TEXTURE
TK	THICKNESS
TT	TREATMENT
TR	TRIM
TY	TYPE
YN	UNIT
VA	VARIETY
WT	WEIGHT
WD	WIDTH

Table 5 - MATERIALS  
MATERIALS

<u>REPLY CODE</u>	<u>REPLY (AD09)</u>
ALC000	ALUMINUM
AL0000	ALUMINUM ALLOY
A	ANY ACCEPTABLE
BR0000	BRASS
CJ0000	CERAMIC
CU0000	COPPER
CK0000	COPPER ALLOY
FG0000	FIBERGLASS
GS0000	GLASS
GSA000	GLASS, EPOXY
ME0000	METAL
PF0000	PAPER
PC0000	PLASTIC
PCAAAT	PLASTIC, EPOXY RESIN
PCW000	PLASTIC, PHENOLIC
PCAAZ0	PLASTIC, PHENOLIC LAMINATE
ST0000	STEEL Steel Alloy (use Reply Code ST0000)

Table 6 - SURFACE TREATMENTS  
SURFACE TREATMENTS

<u>REPLY CODE</u>	<u>REPLY (AD09)</u>
AN0000	ANODIZED

FIIG A135  
APPENDIX A

<u>REPLY CODE</u>	<u>REPLY (AD09)</u>
A	ANY ACCEPTABLE
CD0000	CADMIUM
CDR000	CADMIUM PLATED
CL0000	CHEMICAL
EN0000	ENAMEL
LQ0000	LACQUER
PNG000	PAINT
PCBH00	PLASTIC COATED
AGE000	SILVER PLATED
SNF000	TIN PLATED
TDA000	TINNED
TD0000	TINNED DIPPED HOT
VAB000	VARNISH
ZN0000	ZINC
ZNK000	ZINC DIPPED
ZNN000	ZINC PLATED

Table 7 - LIST OF RADIONUCLIDES  
LIST OF RADIONUCLIDES

<u>REPLY CODE</u>	<u>MATERIAL ELEMENT</u>	<u>RADIONUCLIDES</u>
AAAY	BERYLLIUM (4)	BE-7
AAHF	RADIUM (88)	RA-223
AAHG	RADIUM (88)	RA-224
AAHH	RADIUM (88)	RA-226
AAHJ	RADIUM (88)	RA-228
AAKZ	THORIUM (90)	TH-227
AALA	THORIUM (90)	TH-228
AALB	THORIUM (90)	TH-230
AALC	THORIUM (90)	TH-231
AALD	THORIUM (90)	TH-232
AALE	THORIUM (90)	TH-234
AALF	THORIUM (90)	TH-NATURAL
AALP	TRITIUM (1)	H-3
AALQ	TRITIUM (1)	H-3 AS GAS, LUMINOUS POINT, OR ABSORBED ON SOLID MATERIAL

## Reference Drawing Groups

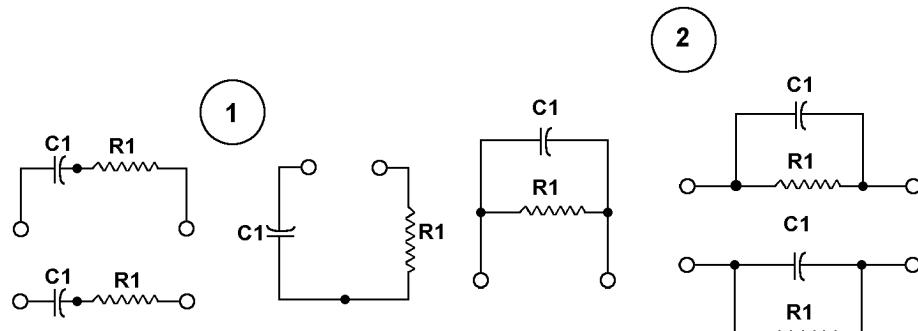
REFERENCE DRAWING GROUP A .....	39
Tables .....	62

REFERENCE DRAWING GROUP A

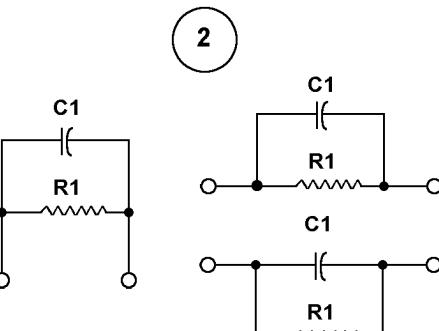
SCHEMATIC DIAGRAMS

(No Requirements)

Schematic diagrams inclosed in broken line blocks indicate two or more circuits comprising an individual schematic diagram.

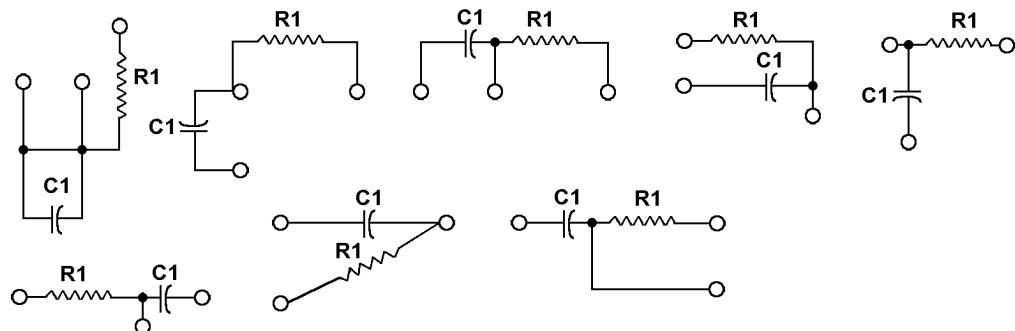


1 CAPACITOR, 1 RESISTOR



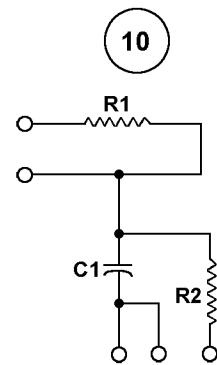
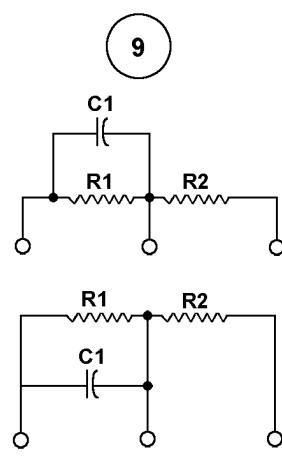
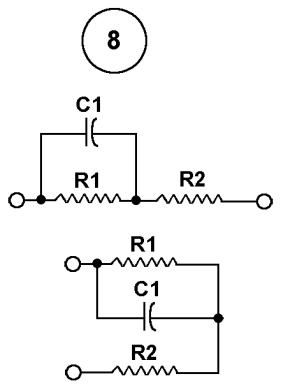
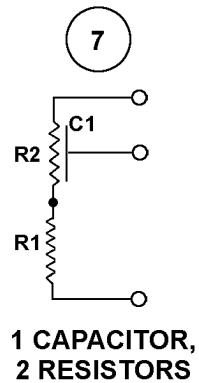
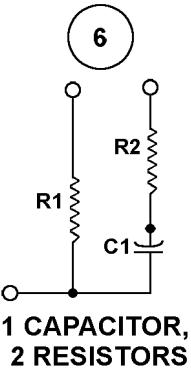
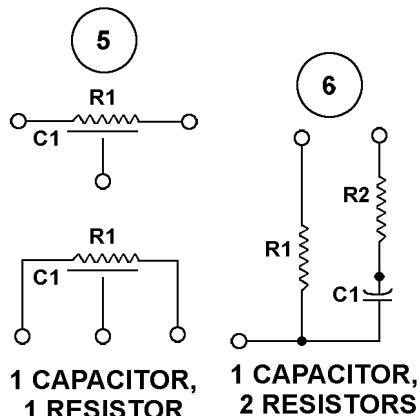
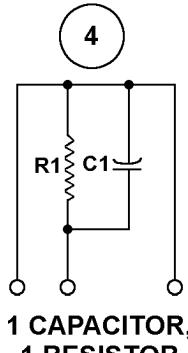
1 CAPACITOR, 1 RESISTOR

3



1 CAPACITOR, 1 RESISTOR

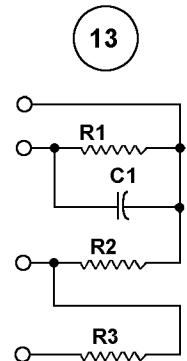
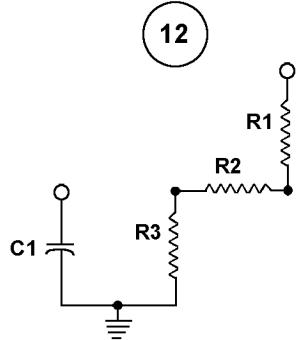
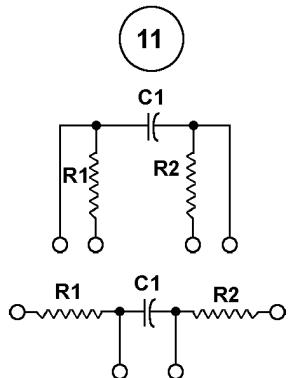
FIIG A135  
APPENDIX B



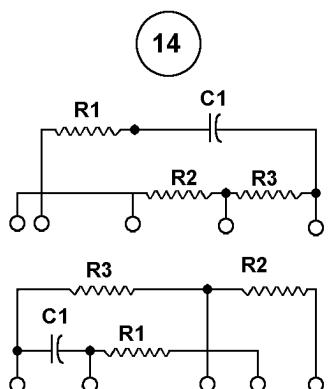
1 CAPACITOR, 2 RESISTORS

1 CAPACITOR, 2 RESISTORS

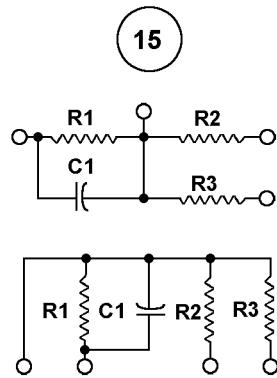
1 CAPACITOR, 2 RESISTORS



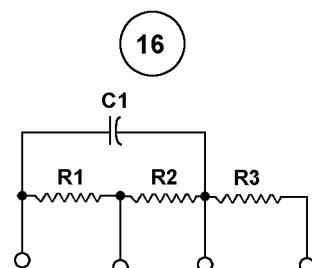
FIIG A135  
APPENDIX B



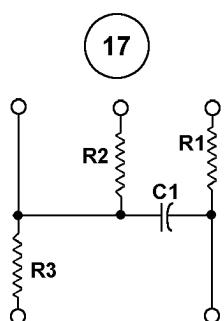
1 CAPACITOR, 3 RESISTORS



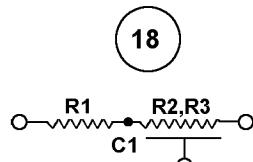
1 CAPACITOR, 3 RESISTORS



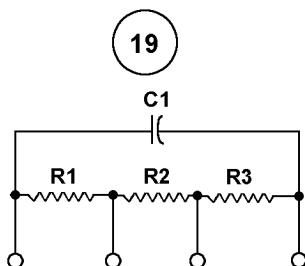
1 CAPACITOR, 3 RESISTORS



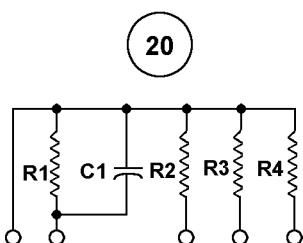
1 CAPACITOR, 3 RESISTORS



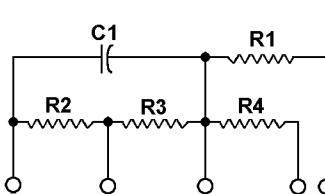
1 CAPACITOR, 3 RESISTORS



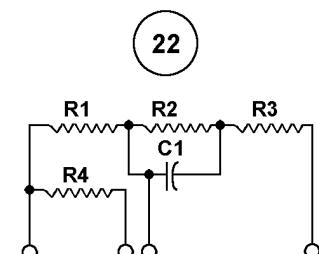
1 CAPACITOR, 3 RESISTORS



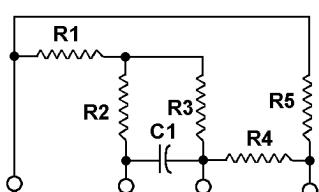
1 CAPACITOR, 4 RESISTORS



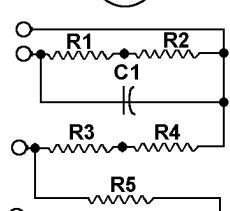
1 CAPACITOR, 4 RESISTORS



1 CAPACITOR, 4 RESISTORS

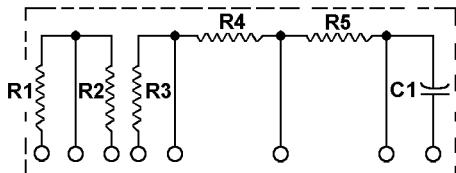


1 CAPACITOR, 5 RESISTORS



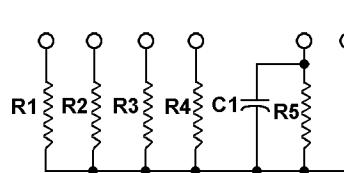
1 CAPACITOR, 5 RESISTORS

25



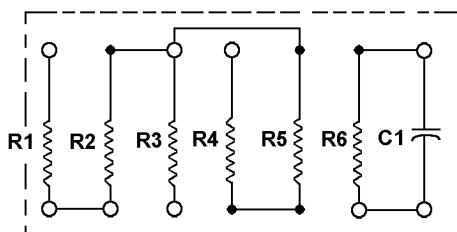
1 CAPACITOR, 5 RESISTORS

26



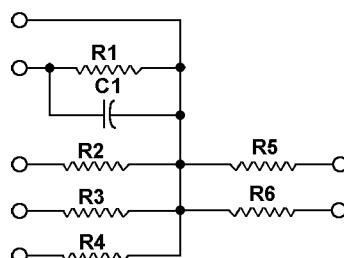
1 CAPACITOR, 5 RESISTORS

27



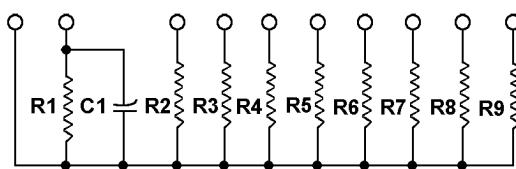
1 CAPACITOR, 6 RESISTORS

28



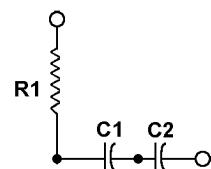
1 CAPACITOR, 6 RESISTORS

29



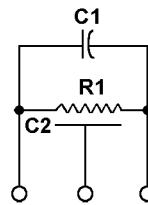
1 CAPACITOR, 9 RESISTORS

30



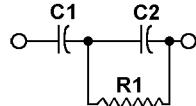
2 CAPACITORS, 1 RESISTOR

31



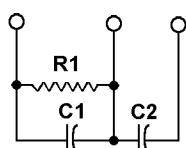
2 CAPACITORS, 1 RESISTOR

32



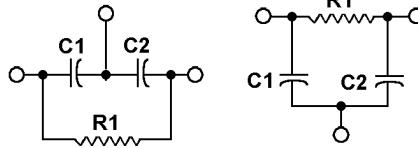
2 CAPACITORS, 1 RESISTOR

33



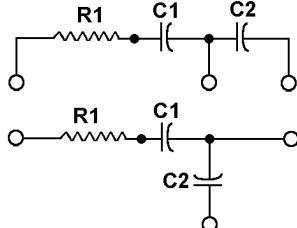
2 CAPACITORS, 1 RESISTOR

34



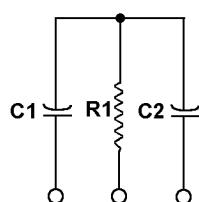
2 CAPACITORS, 1 RESISTOR

35



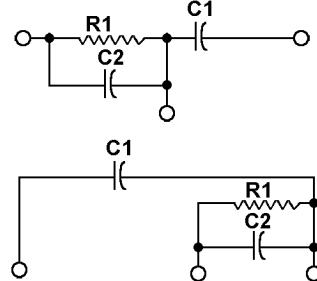
2 CAPACITORS, 1 RESISTOR

36



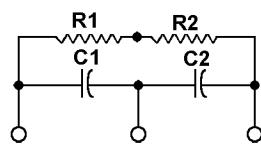
2 CAPACITORS, 1 RESISTOR

37



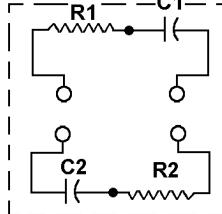
2 CAPACITORS, 1 RESISTOR

38



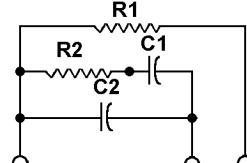
2 CAPACITORS, 2 RESISTORS

39



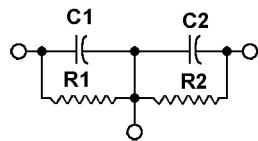
2 CAPACITORS, 2 RESISTORS

40



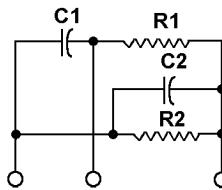
2 CAPACITORS, 2 RESISTORS

41



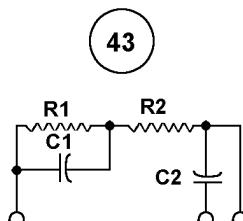
2 CAPACITORS, 2 RESISTORS

42

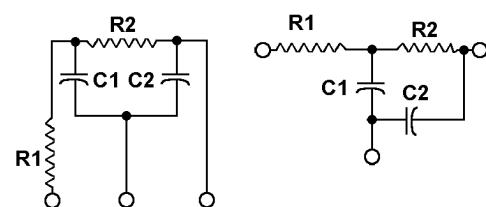


2 CAPACITORS, 2 RESISTORS

44

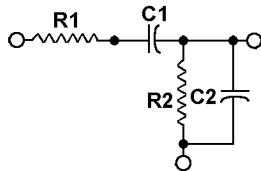


2 CAPACITORS, 2 RESISTORS



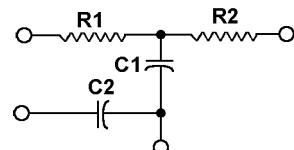
2 CAPACITORS, 2 RESISTORS

45



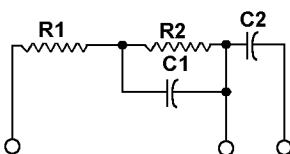
2 CAPACITORS, 2 RESISTORS

46



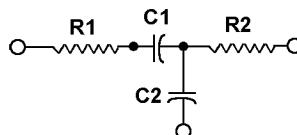
2 CAPACITORS, 2 RESISTORS

47



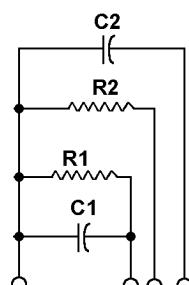
2 CAPACITORS, 2 RESISTORS

48



2 CAPACITORS, 2 RESISTORS

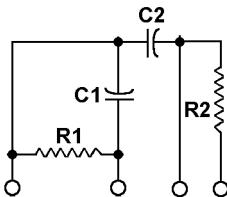
49



2 CAPACITORS, 2 RESISTORS

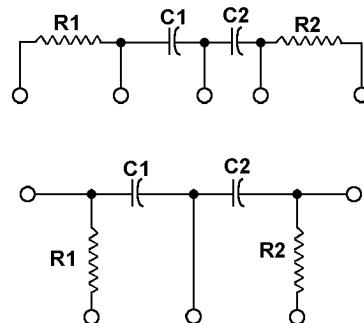
FIIG A135  
APPENDIX B

49A



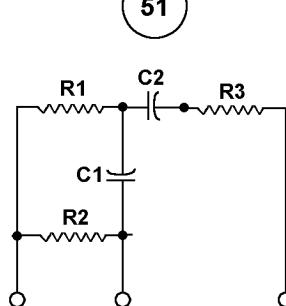
2 CAPACITORS, 2 RESISTORS

50



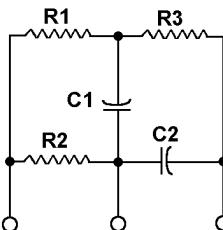
2 CAPACITORS, 2 RESISTORS

51



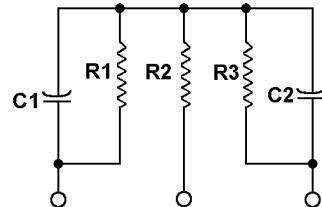
2 CAPACITORS, 3 RESISTORS

52



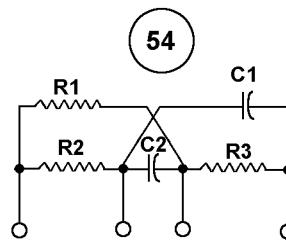
2 CAPACITORS, 3 RESISTORS

53



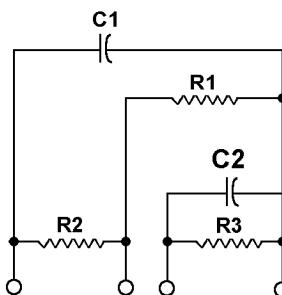
2 CAPACITORS, 3 RESISTORS

54



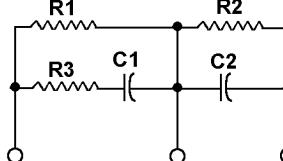
2 CAPACITORS, 3 RESISTORS

55



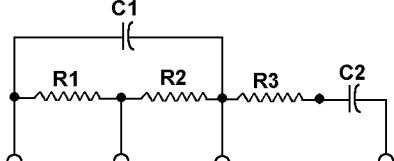
2 CAPACITORS, 3 RESISTORS

56



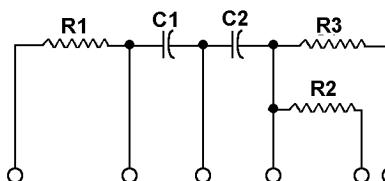
2 CAPACITORS, 3 RESISTORS

57



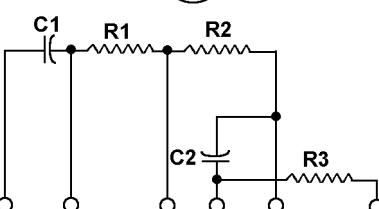
2 CAPACITORS, 3 RESISTORS

58

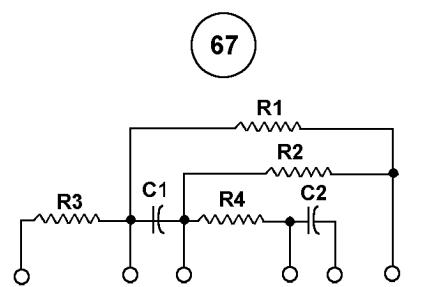
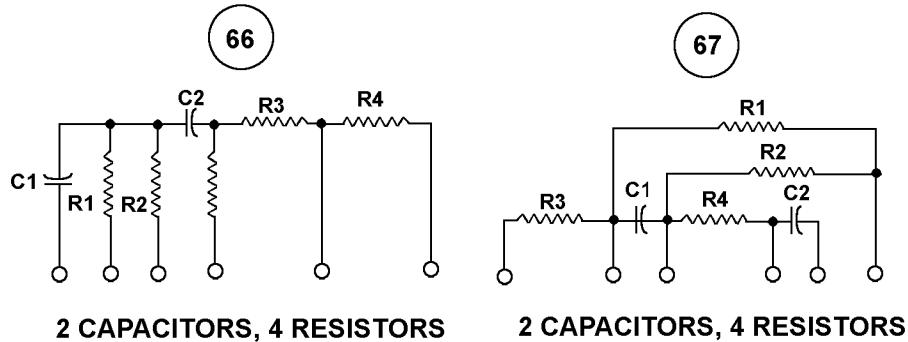
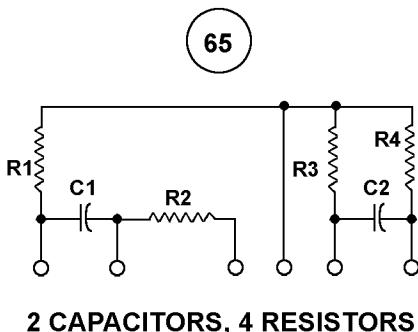
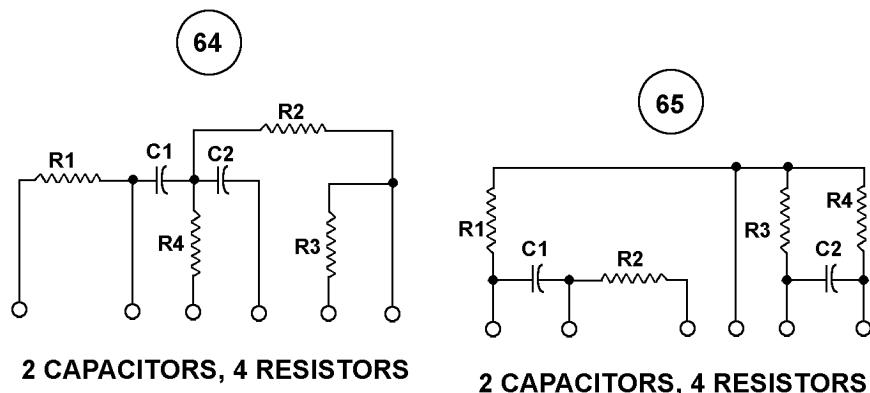
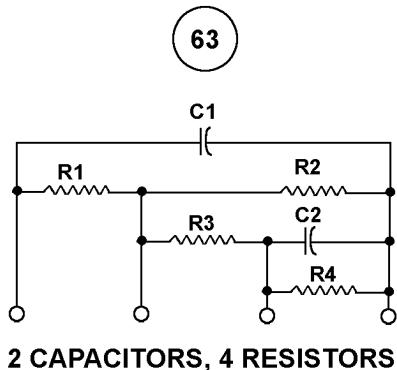
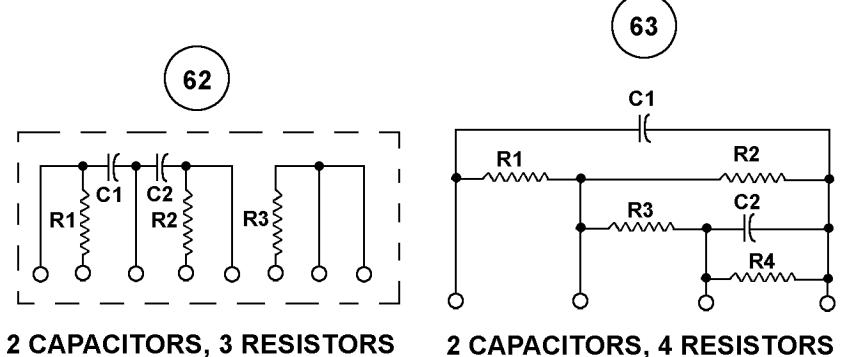
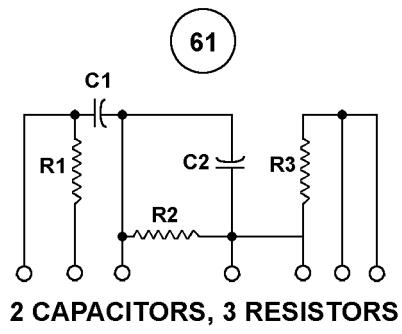
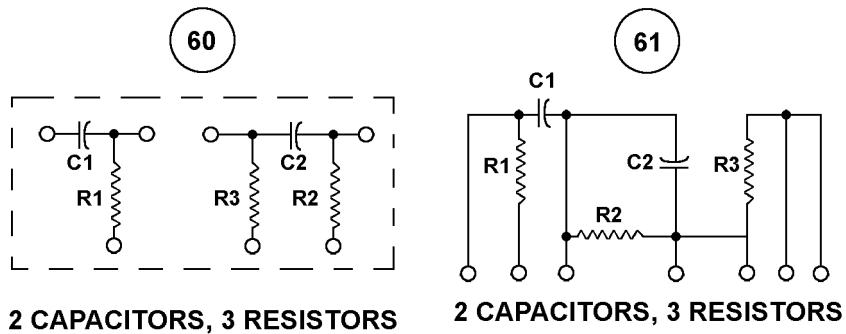


2 CAPACITORS, 3 RESISTORS

59

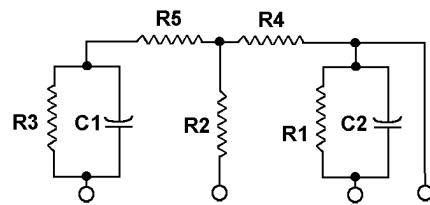


2 CAPACITORS, 3 RESISTORS



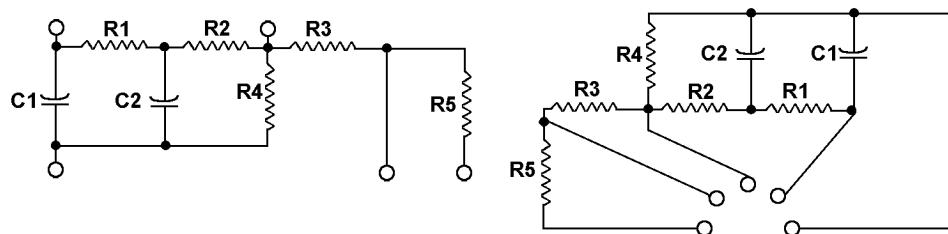
FIIG A135  
APPENDIX B

68



2 CAPACITORS, 5 RESISTORS

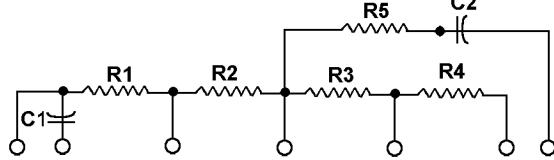
69



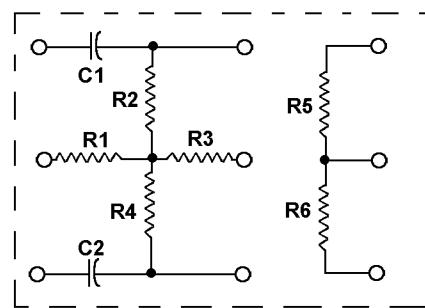
2 CAPACITORS, 5 RESISTORS

71

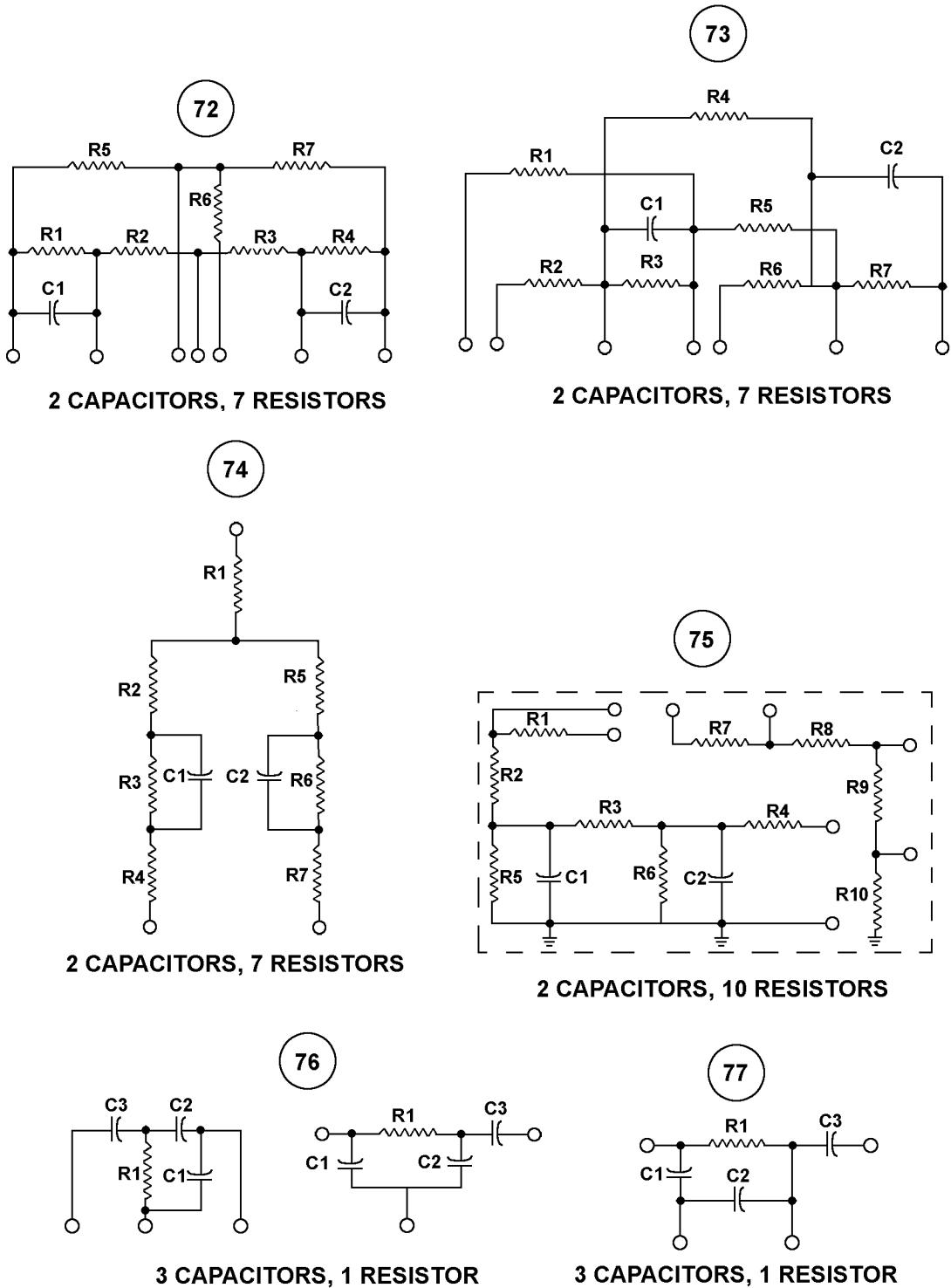
70



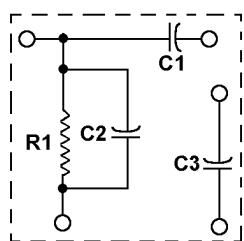
2 CAPACITORS, 5 RESISTORS



2 CAPACITORS, 6 RESISTORS

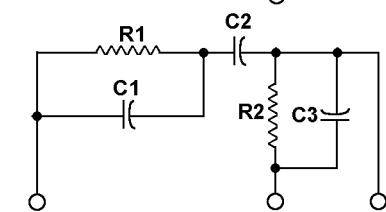
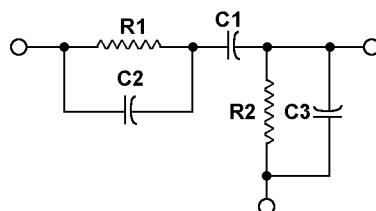


78



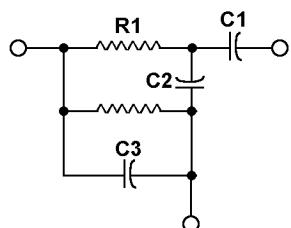
3 CAPACITORS, 1 RESISTOR

80



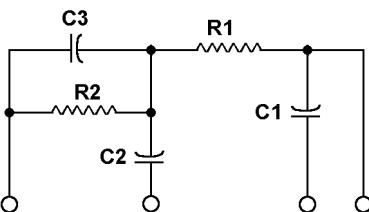
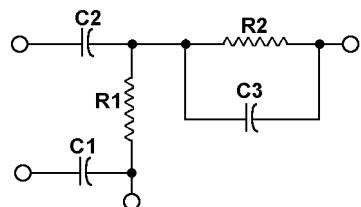
3 CAPACITORS, 2 RESISTORS

79



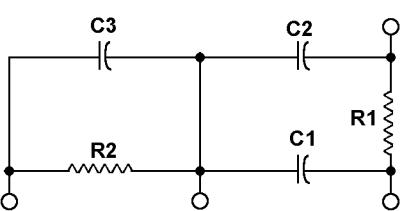
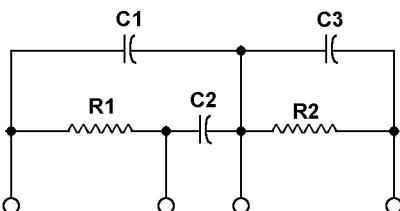
3 CAPACITORS, 2 RESISTORS

81



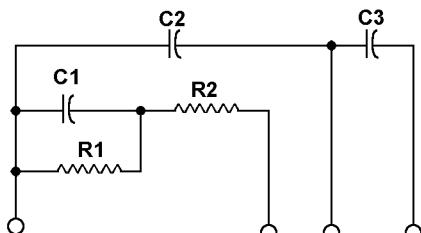
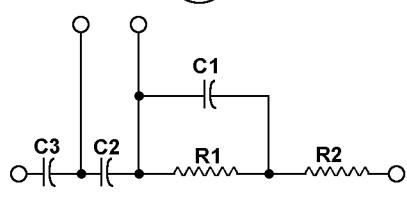
3 CAPACITORS, 2 RESISTORS

82

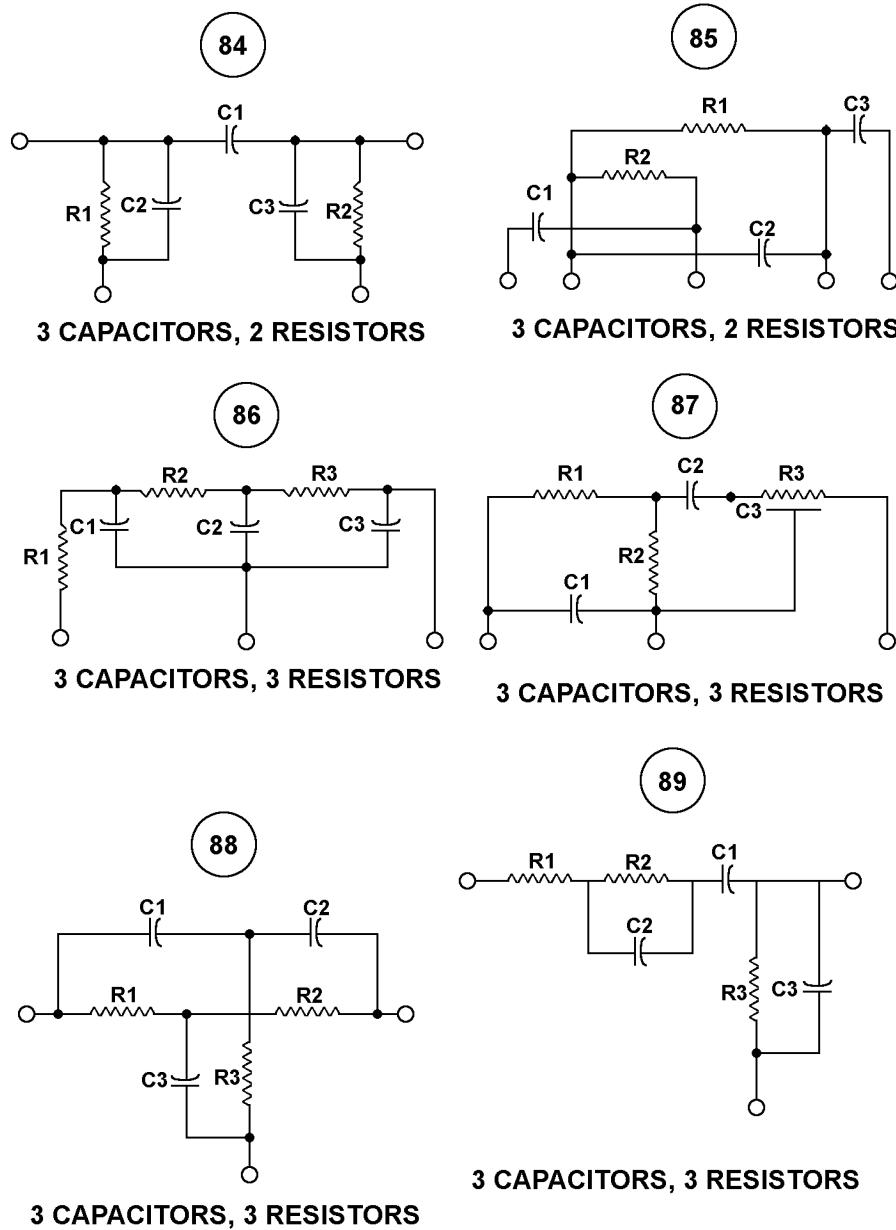


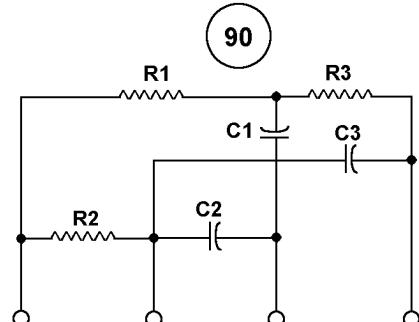
3 CAPACITORS, 2 RESISTORS

83

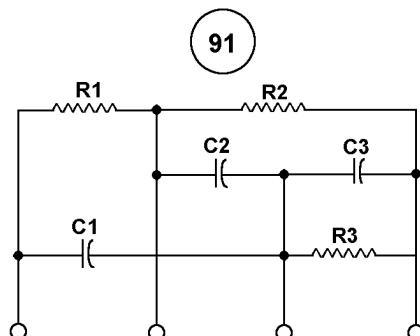


3 CAPACITORS, 2 RESISTORS

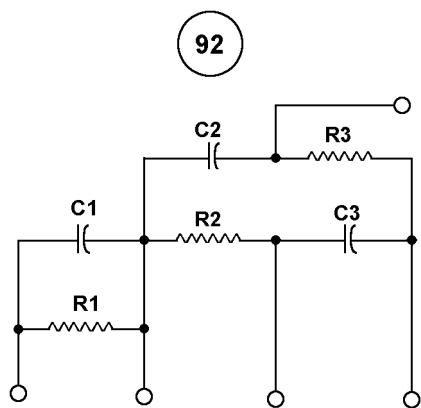




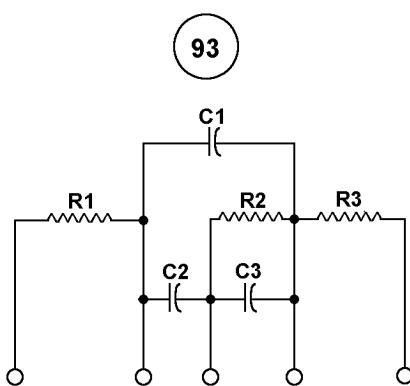
3 CAPACITORS, 3 RESISTORS



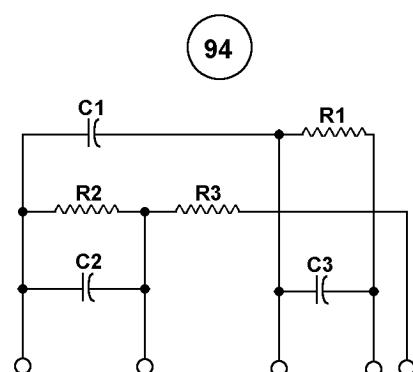
3 CAPACITORS, 3 RESISTORS



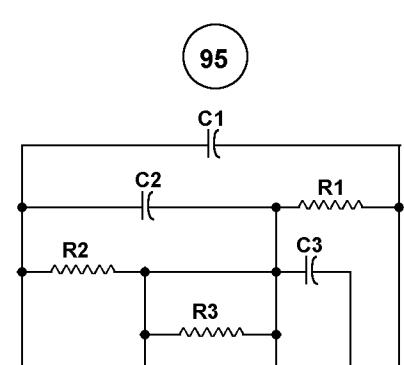
3 CAPACITORS, 3 RESISTORS



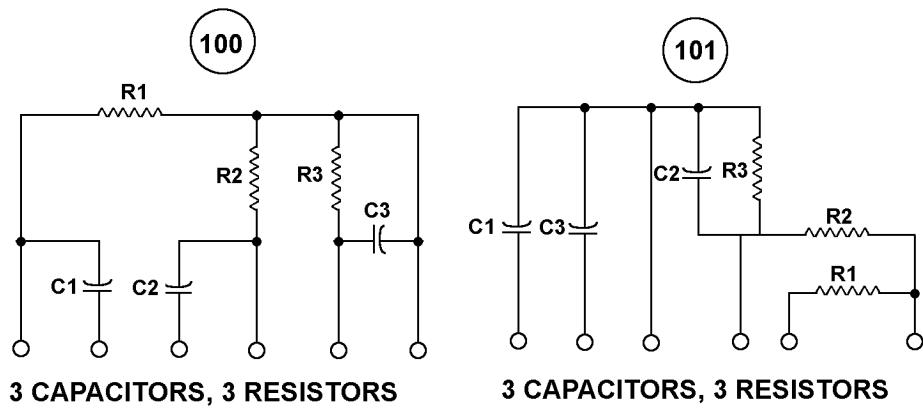
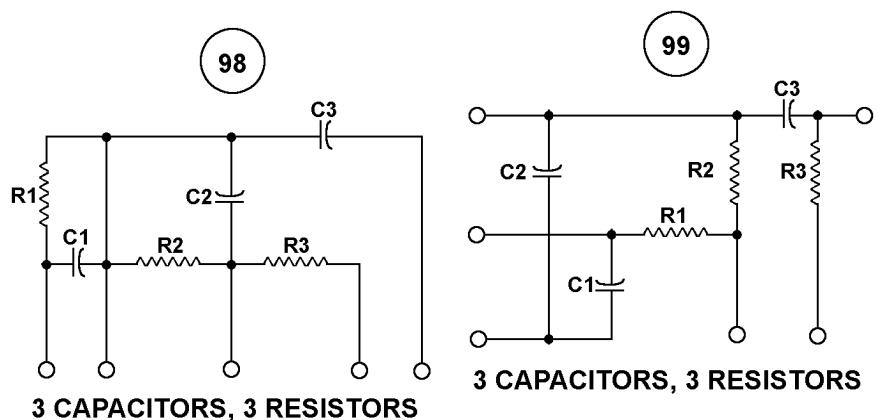
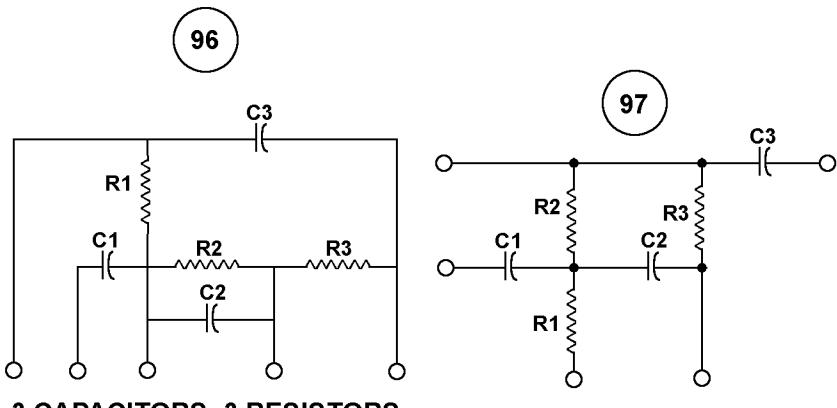
3 CAPACITORS, 3 RESISTORS

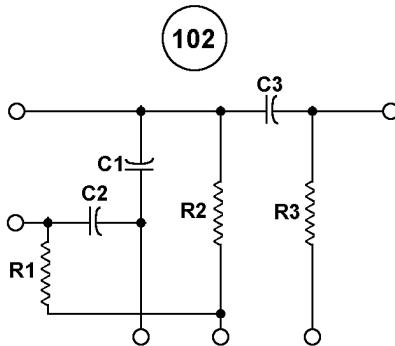


3 CAPACITORS, 3 RESISTORS

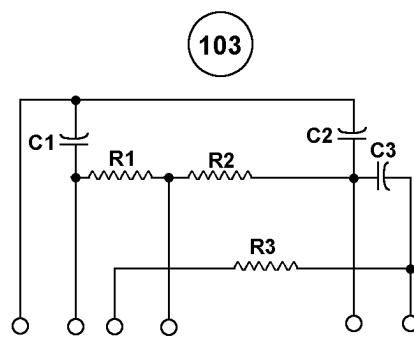


3 CAPACITORS, 3 RESISTORS

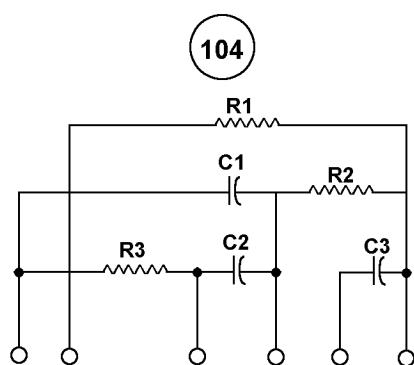




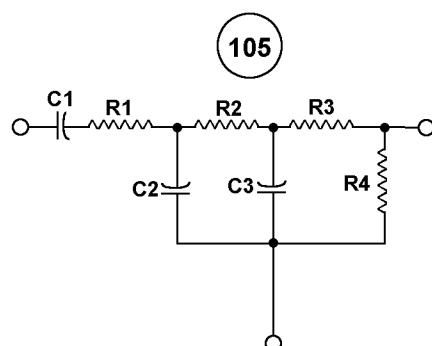
3 CAPACITORS, 3 RESISTORS



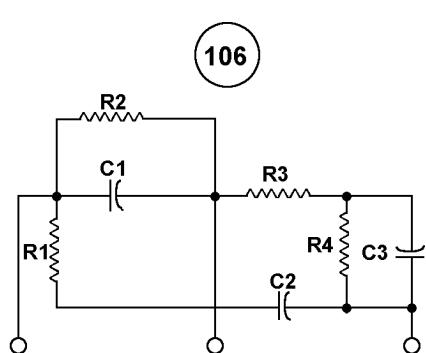
3 CAPACITORS, 3 RESISTORS



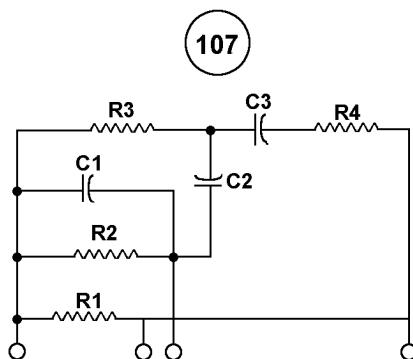
3 CAPACITORS, 3 RESISTORS



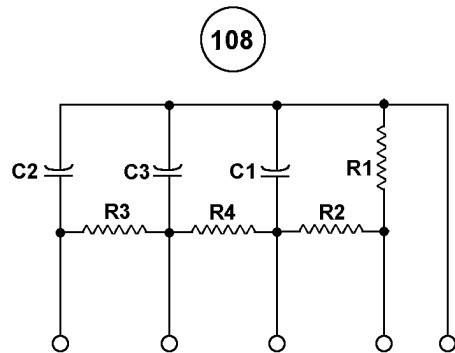
3 CAPACITORS, 4 RESISTORS



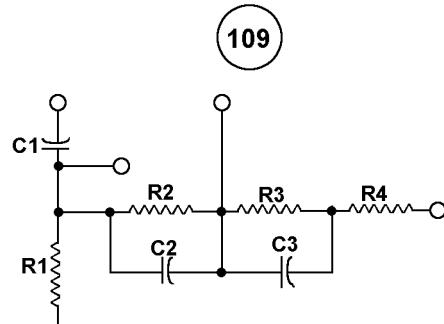
3 CAPACITORS, 4 RESISTORS



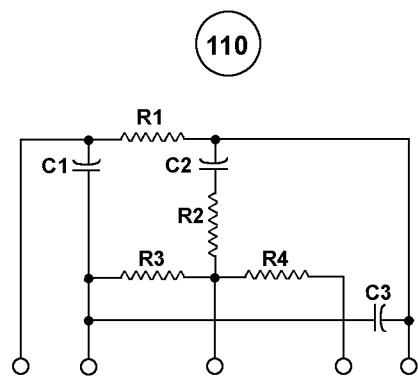
3 CAPACITORS, 4 RESISTORS



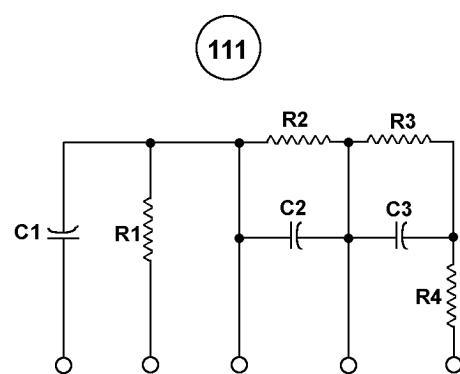
3 CAPACITORS, 4 RESISTORS



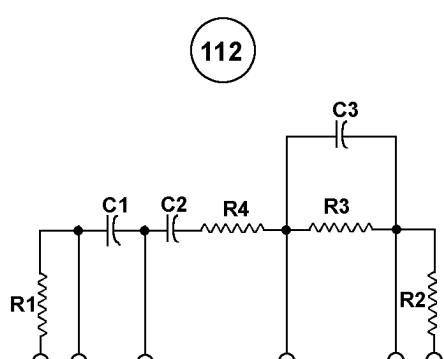
3 CAPACITORS, 4 RESISTORS



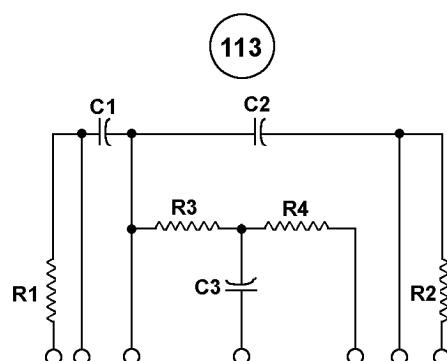
3 CAPACITORS, 4 RESISTORS



3 CAPACITORS, 4 RESISTORS

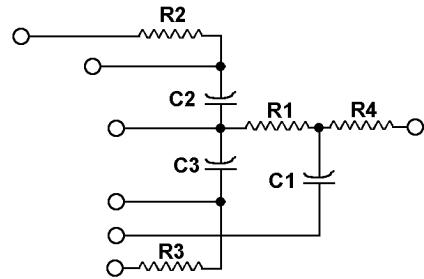
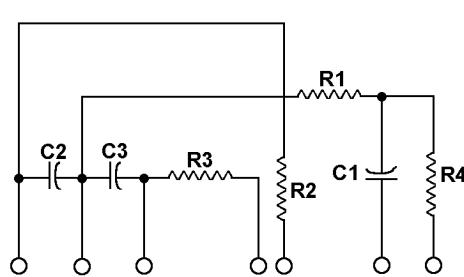


3 CAPACITORS, 4 RESISTORS



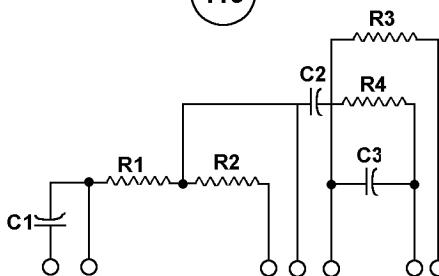
3 CAPACITORS, 4 RESISTORS

114



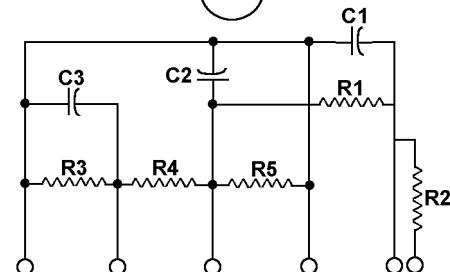
3 CAPACITORS, 4 RESISTORS

115



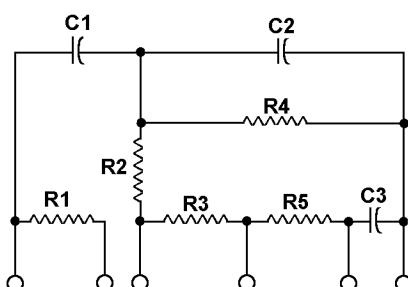
3 CAPACITORS, 4 RESISTORS

116



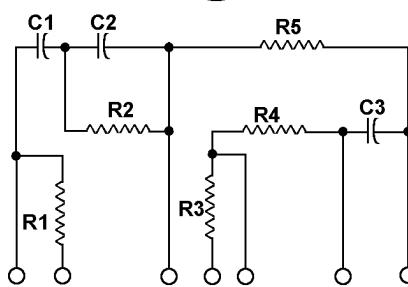
3 CAPACITORS, 5 RESISTORS

117

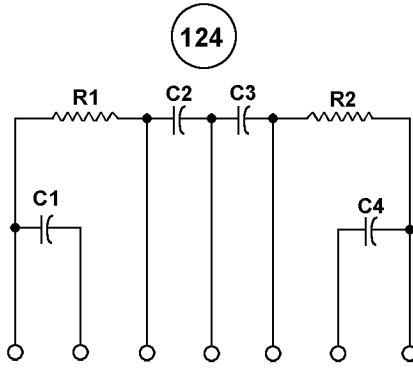
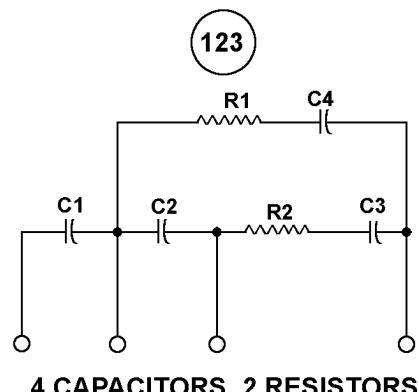
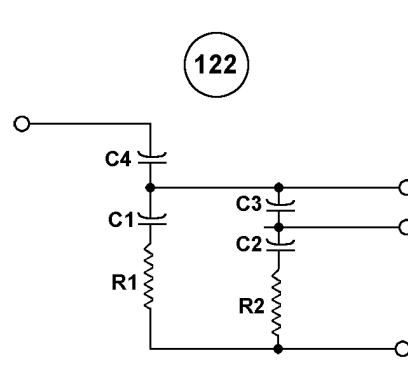
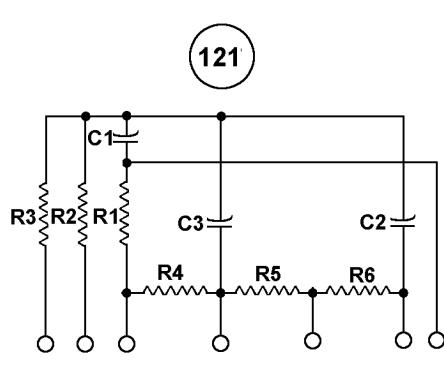
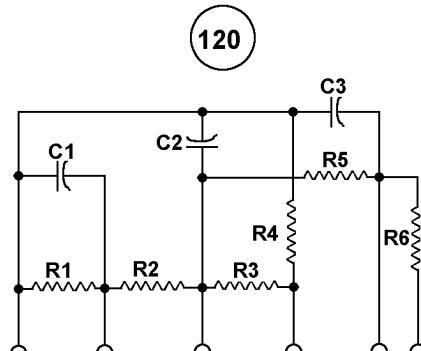
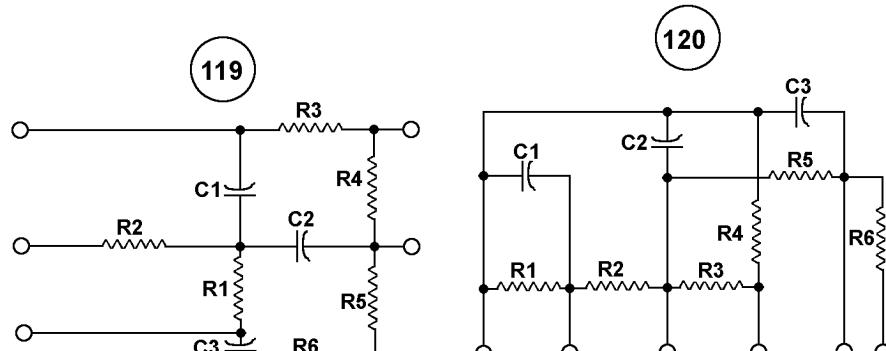


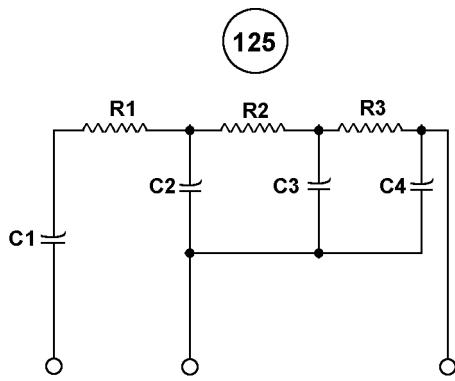
3 CAPACITORS, 5 RESISTORS

118

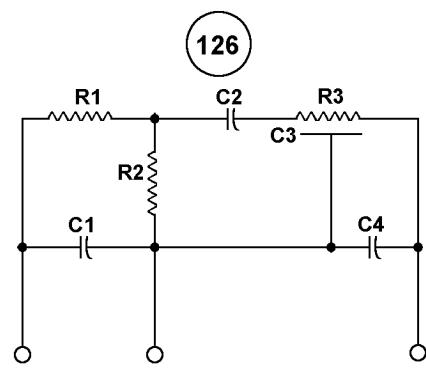


3 CAPACITORS, 5 RESISTORS

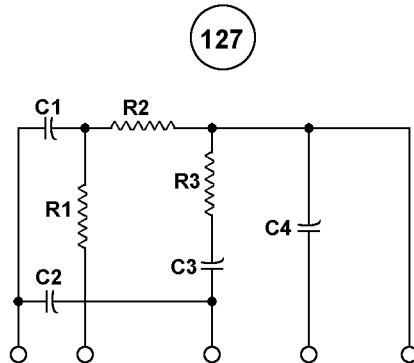




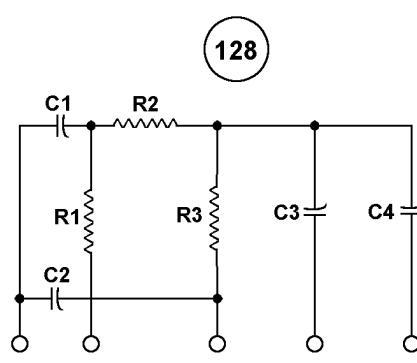
4 CAPACITORS, 3 RESISTORS



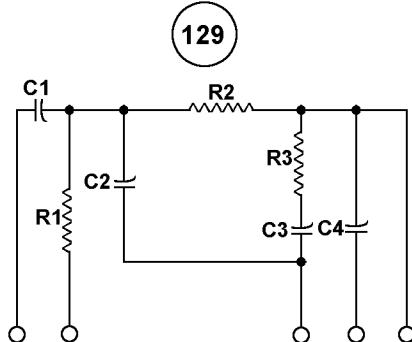
4 CAPACITORS, 3 RESISTORS



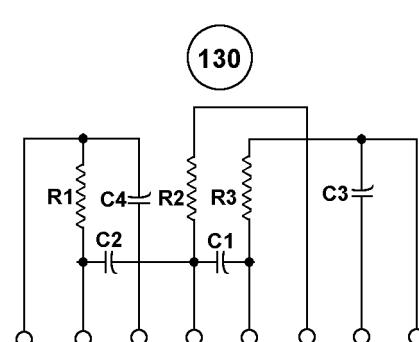
4 CAPACITORS, 3 RESISTORS



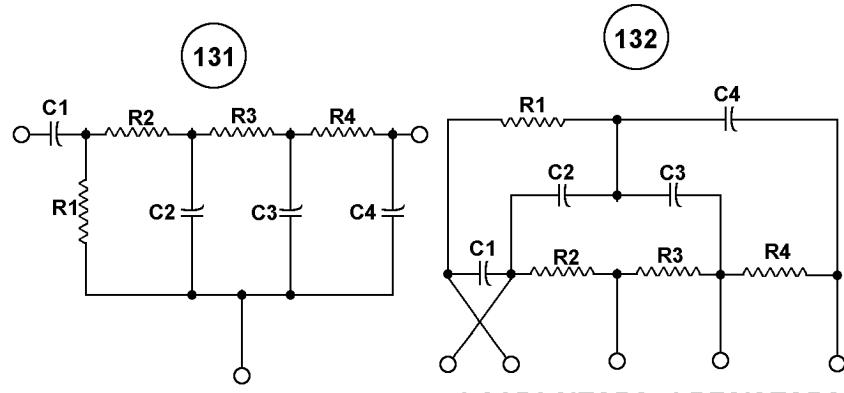
4 CAPACITORS, 3 RESISTORS



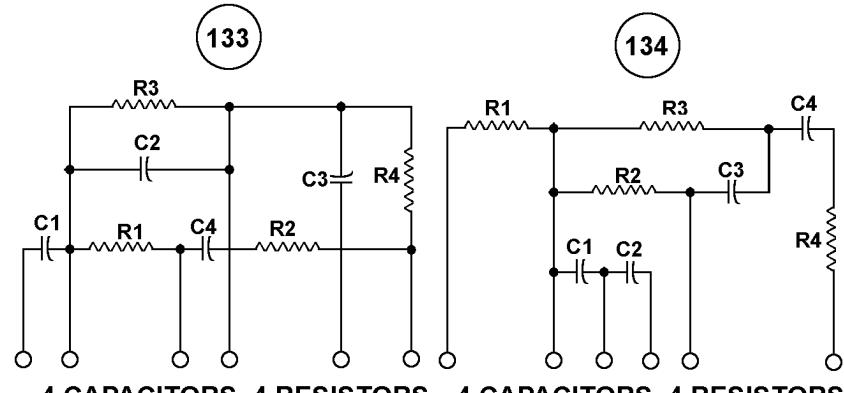
4 CAPACITORS, 3 RESISTORS



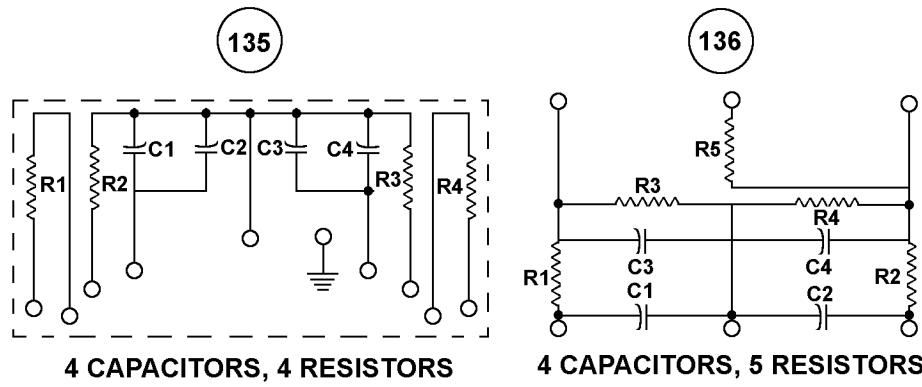
4 CAPACITORS, 3 RESISTORS



4 CAPACITORS, 4 RESISTORS    4 CAPACITORS, 4 RESISTORS

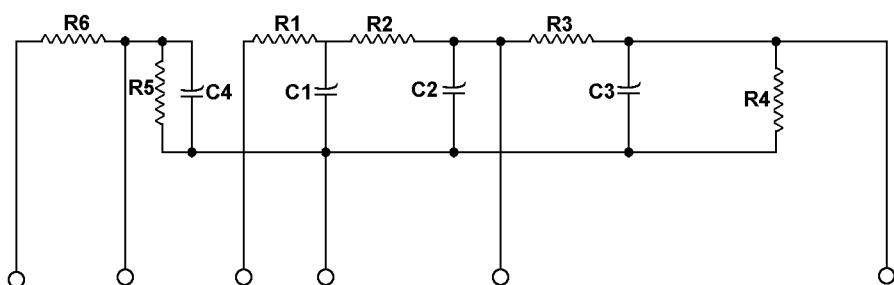


4 CAPACITORS, 4 RESISTORS    4 CAPACITORS, 4 RESISTORS



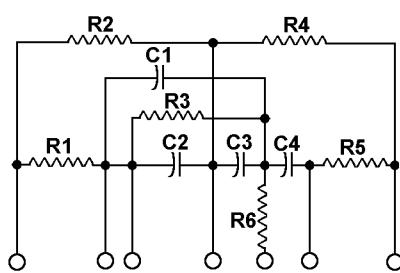
4 CAPACITORS, 4 RESISTORS    4 CAPACITORS, 5 RESISTORS

137



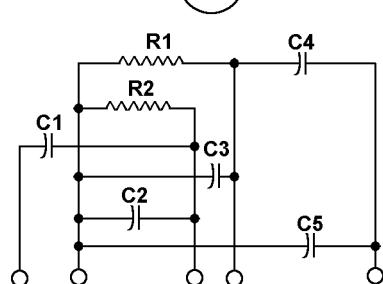
4 CAPACITORS, 6 RESISTORS

138



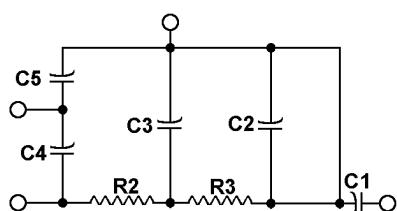
4 CAPACITORS, 6 RESISTORS

139



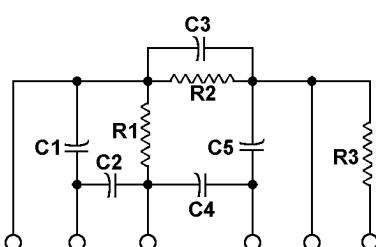
5 CAPACITORS, 2 RESISTORS

140

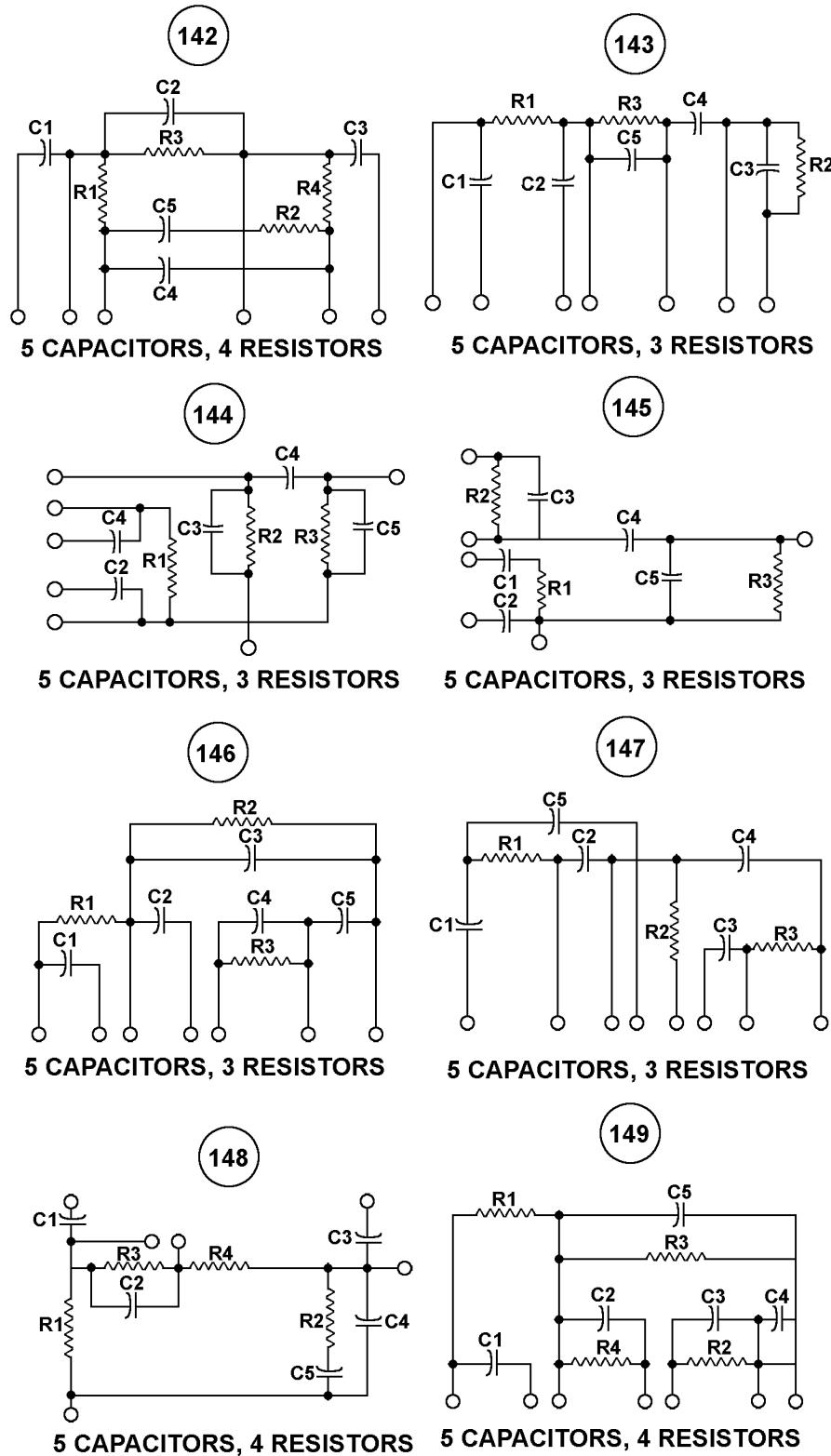


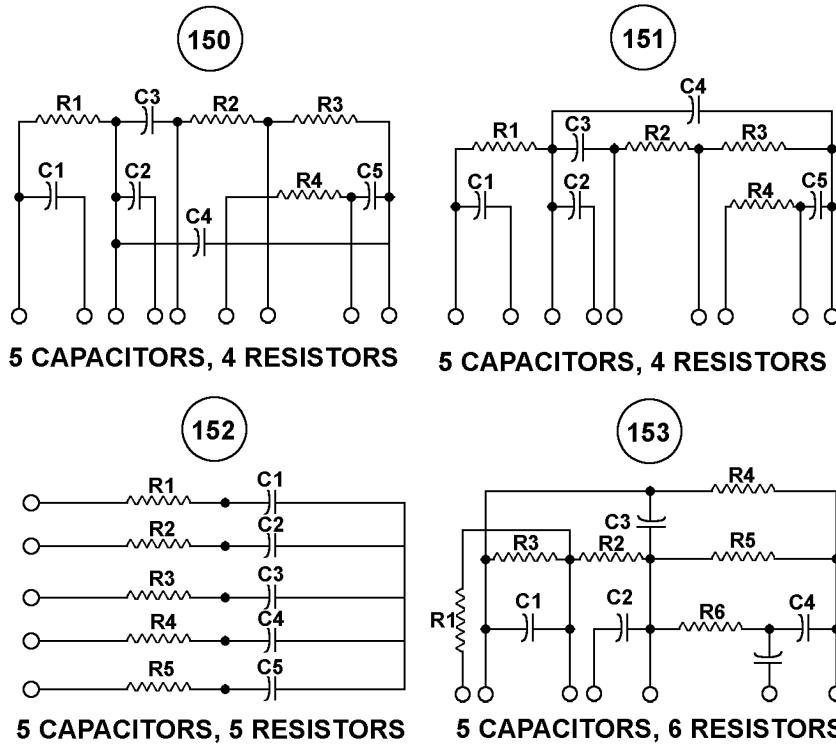
5 CAPACITORS, 3 RESISTORS

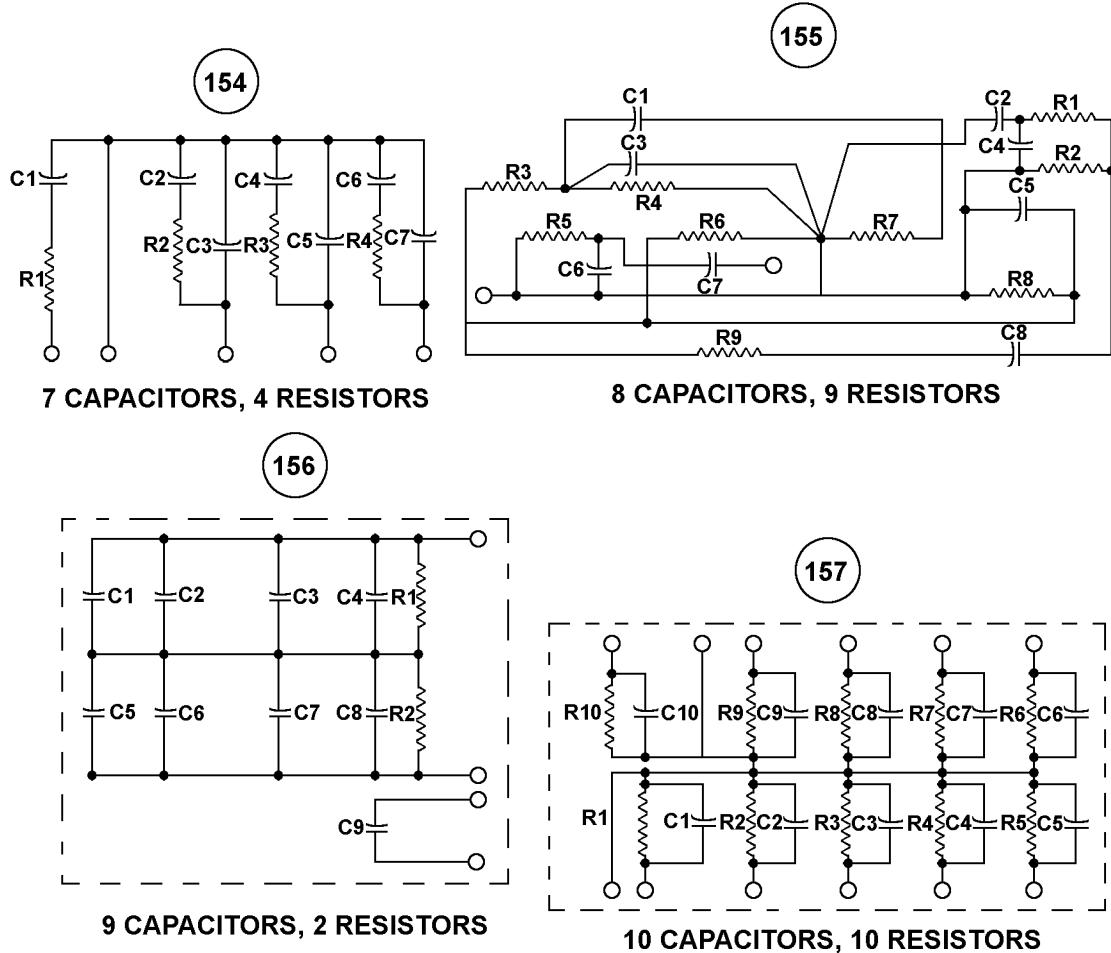
141



5 CAPACITORS, 3 RESISTORS







Tables  
SCHEMATIC DESIGNATIONS

<u>REPLY</u>		<u>DESIGNATOR</u>
1 CAPACITOR, 1	(not electrically connected)	300
1 CAPACITOR, 2	" "	301
1 CAPACITOR, 3	" "	302
1 CAPACITOR, 4	" "	303
1 CAPACITOR, 5	" "	304
1 CAPACITOR, 6	" "	305
1 CAPACITOR, 7	" "	306
1 CAPACITOR, 8	" "	307
1 CAPACITOR, 9	" "	308
1 CAPACITOR, 10	" "	309
1 CAPACITOR, 11	" "	310

FIIG A135  
APPENDIX B

<u>REPLY</u>	<u>DESIGNATOR</u>
1 CAPACITOR, 12	311
1 CAPACITOR, 13	312
1 CAPACITOR, 14	313
1 CAPACITOR, 15	314
1 CAPACITOR, 16	315
1 CAPACITOR, 17	316
1 CAPACITOR, 18	317
1 CAPACITOR, 19	318
1 CAPACITOR, 20	319
2 CAPACITORS, 1	320
2 CAPACITORS, 2	321
2 CAPACITORS, 3	322
2 CAPACITORS, 4	323
2 CAPACITORS, 5	324
2 CAPACITORS, 6	325
2 CAPACITORS, 7	326
2 CAPACITORS, 8	327
2 CAPACITORS, 9	328
2 CAPACITORS, 10	329
3 CAPACITORS, 1	330
3 CAPACITORS, 2	331
3 CAPACITORS, 3	332
3 CAPACITORS, 4	333
3 CAPACITORS, 5	334
3 CAPACITORS, 6	335
3 CAPACITORS, 7	336
3 CAPACITORS, 8	337
3 CAPACITORS, 9	338
3 CAPACITORS, 10	339
3 CAPACITORS, 11	340
3 CAPACITORS, 12	341
3 CAPACITORS, 13	342
3 CAPACITORS, 14	343
3 CAPACITORS, 15	344
4 CAPACITORS, 1	345
4 CAPACITORS, 2	346
4 CAPACITORS, 3	347
4 CAPACITORS, 4	348
4 CAPACITORS, 5	349
4 CAPACITORS, 6	350
4 CAPACITORS, 7	351
4 CAPACITORS, 8	352

FIIG A135  
APPENDIX B

<u>REPLY</u>		<u>DESIGNATOR</u>
4 CAPACITORS, 9	"" "	353
4 CAPACITORS, 10	"" "	354
4 CAPACITORS, 11	"" "	355
4 CAPACITORS, 12	"" "	356
4 CAPACITORS, 13	"" "	357
4 CAPACITORS, 14	"" "	358
4 CAPACITORS, 15	"" "	359
5 CAPACITORS, 1	"" "	360
5 CAPACITORS, 2	"" "	361
5 CAPACITORS, 3	"" "	362
5 CAPACITORS, 4	"" "	363
5 CAPACITORS, 5	"" "	364
5 CAPACITORS, 6	"" "	365
5 CAPACITORS, 7	"" "	366
5 CAPACITORS, 8	"" "	367
5 CAPACITORS, 9	"" "	368
5 CAPACITORS, 10	"" "	369
5 CAPACITORS, 11	"" "	370
5 CAPACITORS, 12	"" "	371
5 CAPACITORS, 13	"" "	372
5 CAPACITORS, 14	"" "	373
5 CAPACITORS, 15	"" "	374
6 CAPACITORS, 1	"" "	375
6 CAPACITORS, 2	"" "	376
6 CAPACITORS, 3	"" "	377
6 CAPACITORS, 4	"" "	378
6 CAPACITORS, 5	"" "	379
6 CAPACITORS, 6	"" "	380
6 CAPACITORS, 7	"" "	381
6 CAPACITORS, 8	"" "	382
6 CAPACITORS, 9	"" "	383
6 CAPACITORS, 10	"" "	384
6 CAPACITORS, 11	"" "	385
6 CAPACITORS, 12	"" "	386
6 CAPACITORS, 13	"" "	387
6 CAPACITORS, 14	"" "	388
6 CAPACITORS, 15	"" "	389
6 CAPACITORS, 16	"" "	390
6 CAPACITORS, 17	"" "	391
6 CAPACITORS, 18	"" "	392
6 CAPACITORS, 19	"" "	393
6 CAPACITORS, 20	"" "	394

FIIG A135  
APPENDIX B

<u>REPLY</u>		<u>DESIGNATOR</u>
6 CAPACITORS, 21	"" "	395
6 CAPACITORS, 22	"" "	396
6 CAPACITORS, 23	"" "	397
6 CAPACITORS, 24	"" "	398
6 CAPACITORS, 25	"" "	399
6 CAPACITORS, 26	"" "	400
6 CAPACITORS, 27	"" "	401
7 CAPACITORS, 1	"" "	402
7 CAPACITORS, 2	"" "	403
7 CAPACITORS, 3	"" "	404
7 CAPACITORS, 4	"" "	405
7 CAPACITORS, 5	"" "	406
7 CAPACITORS, 6	"" "	407
7 CAPACITORS, 7	"" "	408
7 CAPACITORS, 8	"" "	409
7 CAPACITORS, 9	"" "	410
7 CAPACITORS, 10	"" "	411
7 CAPACITORS, 11	"" "	412
7 CAPACITORS, 12	"" "	413
7 CAPACITORS, 13	"" "	414
7 CAPACITORS, 14	"" "	415
7 CAPACITORS, 15	"" "	416
8 CAPACITORS, 1	"" "	417
8 CAPACITORS, 2	"" "	418
8 CAPACITORS, 3	"" "	419
8 CAPACITORS, 4	"" "	420
8 CAPACITORS, 5	"" "	421
8 CAPACITORS, 6	"" "	422
8 CAPACITORS, 7	"" "	423
8 CAPACITORS, 8	"" "	424
8 CAPACITORS, 9	"" "	425
8 CAPACITORS, 10	"" "	426
8 CAPACITORS, 11	"" "	427
8 CAPACITORS, 12	"" "	428
8 CAPACITORS, 13	"" "	429
8 CAPACITORS, 14	"" "	430
8 CAPACITORS, 15	"" "	431
8 CAPACITORS, 16	"" "	432
8 CAPACITORS, 17	"" "	433
8 CAPACITORS, 18	"" "	434
8 CAPACITORS, 19	"" "	435
8 CAPACITORS, 20	"" "	436

FIIG A135  
APPENDIX B

<u>REPLY</u>	<u>DESIGNATOR</u>
8 CAPACITORS, 21	437
8 CAPACITORS, 22	438
8 CAPACITORS, 23	439
8 CAPACITORS, 24	440
8 CAPACITORS, 25	441
10 CAPACITORS, 1	442
10 CAPACITORS, 2	443
10 CAPACITORS, 3	444
10 CAPACITORS, 4	445
10 CAPACITORS, 5	446
10 CAPACITORS, 6	447
10 CAPACITORS, 7	448
10 CAPACITORS, 8	449
10 CAPACITORS, 9	450
10 CAPACITORS, 10	451
12 CAPACITORS, 1	452
12 CAPACITORS, 2	453
12 CAPACITORS, 3	454
12 CAPACITORS, 4	455
12 CAPACITORS, 5	456
12 CAPACITORS, 6	457
12 CAPACITORS, 7	458
12 CAPACITORS, 8	459
12 CAPACITORS, 9	460
12 CAPACITORS, 10	461
12 CAPACITORS, 11	462
12 CAPACITORS, 12	463
12 CAPACITORS, 13	464
12 CAPACITORS, 14	465
12 CAPACITORS, 15	466
12 CAPACITORS, 16	467
12 CAPACITORS, 17	468
12 CAPACITORS, 18	469
12 CAPACITORS, 19	470
12 CAPACITORS, 20	471
12 CAPACITORS, 21	472
12 CAPACITORS, 22	473
12 CAPACITORS, 23	474
12 CAPACITORS, 24	475
12 CAPACITORS, 25	476

## Technical Data Tables

METRIC CONVERSION CHART .....	68
STANDARD FRACTION TO DECIMAL CONVERSION CHART .....	70
THREAD SIZE/SERIES .....	71
OUNCE TO DECIMAL OF A POUND CONVERSION CHART .....	81

FIIG A135  
APPENDIX C

METRIC CONVERSION CHART

<u>ORIGI</u> <u>NAL</u> <u>VALU</u> <u>E</u>	<u>DESI</u> <u>RED</u> <u>VAL</u> <u>UE</u>	Te ra	Gi ga	Me ga	My ria	Ki lo	He cto	De ke	*U nit	De ci	Ce nti	Mi lli	Mi cro	Na no	Pic o	Fe mto	Att o	
		<u>Power</u> <u>of 10</u>	<u>10</u> <u>12</u>	<u>10</u> <u>9</u>	<u>10</u> <u>6</u>	<u>104</u> <u>3</u>	<u>102</u> <u>1</u>	<u>10</u> <u>1</u>	<u>10</u> <u>0</u>	<u>10-</u> <u>1</u>	<u>10-</u> <u>2</u>	<u>10-</u> <u>3</u>	<u>10-</u> <u>6</u>	<u>10-</u> <u>9</u>	<u>12-</u> <u>12</u>	<u>10-</u> <u>15</u>	<u>10-</u> <u>18</u>	
Tera	1012		3 a d	6 a d	8 a d	9 a d	10  d	11  ad	12  ad	13  ad	14  ad	15  ad	18  ad	21  ad	24  ad	27  ad		
Giga	109	aj 3		3 a d	5 a d	6 a d	7 a d	8 a d	9 a d	10  ad	11  ad	12  ad	15  ad	18  ad	21  ad	24  ad	27  ad	
Mega	106	aj 6 3	aj d	2 a d	3 a d	4 a d	5 a d	6 a d	7 a d	8 a d	9 a d	12  ad	15  ad	18  ad	21  ad	24  ad	24  ad	
Myria	104	aj 8 5	aj d	aj2 d	1 a d	2 a d	3 a d	4 a d	5 a d	6 a d	7 a d	10  ad	13  ad	16  ad	19  ad	22  ad		
Kilo	103	aj 9 6	aj d	aj3 d	aj1 d	1 a d	2 a d	3 a d	4 a d	5 a d	6 a d	9 a d	12  ad	15  ad	18  ad	21  ad		
Hecto	102	aj 10 7	aj d	aj4 1	aj2 d	aj d	1 a d	2 a d	3 a d	4 a d	5 a d	8 a d	11  ad	14  ad	17  ad	20  ad		
Deka	101	aj 11 8	aj d	aj5 2	aj3 d	aj d	1 a d	2 a d	3 a d	4 a d	7 a d	10  ad	13  ad	16  ad	19  ad			
*Unit	100	aj 12 9	aj d	aj6 3	aj4 1	aj d	aj d	aj d	aj d	aj d	aj d	6 a d	9 a d	12  ad	15  ad	18  ad		
Deci	10-1	aj 13 10	aj d	aj7 4	aj5 2	aj3 d	aj d	aj1 d		1 a d	2 a d	5 a d	8 a d	11  ad	14  ad	17  ad		
Centi	10-2	aj 14 11	aj d	aj8 5	aj6 3	aj4 2	aj d	aj2 d	aj d	1 a d	4 a d	7 a d	10  ad	13  ad	16  ad			
Milli	10-3	aj 15 12	aj d	aj9 6	aj7 4	aj5 2	aj d	aj3 d	aj d	3 a d	6 a d	9 a d	12  ad	15  ad				
Micro	10-6	aj 18 15	aj d	aj1 2	aj1 0	aj1 9	aj d	aj8 7	aj d	aj6 5	aj d	3 a d	6 a d	9 a d	12  ad			
Nano	10-9	aj 21 18	aj d	aj1 5	aj1 3	aj1 12	aj d	aj1 10	aj d	aj9 8	aj d	aj d	aj3 d	3 a d	6 a d	9 a d		
Pico	10-12	aj 24 21	aj d	aj1 8	aj1 6	aj1 15	aj d	aj1 4	aj d	aj1 13	aj d	aj d	aj6 3	3 a d	6 a d			
Femto	10-15	aj 27 24	aj d	aj2 1	aj1 9	aj1 18	aj d	aj2 7	aj d	aj1 16	aj d	aj d	aj9 6	3 a d	6 a d			
Atto	10-18	aj 30 27	aj d	aj2 4	aj2 2	aj2 21	aj d	aj2 0	aj d	aj1 19	aj d	aj d	aj1 8	aj1 17	aj1 16	aj1 15	aj3 6	

FIIG A135  
APPENDIX C

\* The notation "unit" represents the basic unit of measurement, such as amperes, farads, grams, hertz, meters, ohms, volts, watts, etc.

To convert from one notation (metric or a power of ten) to another, locate the original or given value in the left-hand column. Follow this line horizontally to the vertical column headed by the desired notation. The figure and arrow at the intersection of these two columns indicates the direction and number of places the decimal point is to be moved (e.g., to convert 25,000 kilohertz to megahertz, at the intersection of the horizontal column for kilo and the vertical column for mega find the figure and directional arrow |aj3. Thus, shifting the decimal in 25,000 kilohertz 3 places to the left results in the value of 25 megahertz).

**FIIG A135**  
**APPENDIX C**

**STANDARD FRACTION TO DECIMAL CONVERSION CHART**

<u>4ths</u>	<u>8ths</u>	<u>16ths</u>	<u>32nds</u>	<u>64ths</u>	To 3	To 4	<u>4ths</u>	<u>8ths</u>	<u>16ths</u>	<u>32nds</u>	<u>64ths</u>	To 3	To 4							
				1/64	.016	.0156					33/64	.516	.5156							
				1/32	-----	.031	.0312			17/32	-----	.531	.5312							
				3/64	.047	.0469					35/64	.547	.5469							
				1/16	-----	.062	.0625			9/16	-----	-----	.562	.5625						
					5/64	.078	.0781				37/64	.578	.5781							
					3/32	-----	.094	.0938			19/32	-----	.594	.5938						
					7/64	.109	.1094				39/64	.609	.6094							
					1/8	-----	-----	.125	.1250	5/8	-----	-----	.625	.6250						
						9/64	.141	.1406				41/64	.641	.6406						
						5/32	-----	.156	.1562			21/32	-----	.656	.6562					
						11/64	.172	.1719				43/64	.672	.6719						
						3/16	-----	-----	.188	.1875		11/16	-----	.688	.6875					
							13/64	.203	.2031				45/64	.703	.7031					
							7/32	-----	.219	.2188			23/32	-----	.719	.7188				
							15/64	.234	.2344				47/64	.734	.7344					
							1/4	-----	-----	.250	.2500	3/4	-----	-----	.750	.7500				
								17/64	.266	.2656				49/64	.766	.7656				
								9/32	-----	.281	.2812			25/32	-----	.781	.7812			
								19/64	.297	.2969				51/64	.797	.7969				
								5/16	-----	-----	.312	.3125		13/16	-----	.812	.8125			
									21/64	.328	.3281				53/64	.828	.8281			
									11/32	-----	.344	.3438			27/32	-----	.844	.8438		
									23/64	.359	.3594				55/64	.859	.8594			
									3/8	-----	-----	.375	.3750		7/8	-----	.875	.8750		
										25/64	.391	.3906				57/64	.891	.8906		
										13/32	-----	.406	.4062			29/32	-----	.906	.9062	
										27/64	.422	.4219				59/64	.922	.9219		
										7/16	-----	-----	.438	.4375		15/16	-----	.938	.9375	
											29/64	.453	.4531				61/64	.953	.9531	
											15/32	-----	.469	.4688			31/32	-----	.969	.9688
											31/64	.484	.4844				63/64	.984	.9844	
												.500	.5000				1.000	1.0000		

FIIG A135  
APPENDIX C

THREAD SIZE/SERIES

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
0-80 OR .060-80	UNF
1-64 OR .073-64	UNC
1-72 OR .073-72	UNF
2-56 OR .086-56	UNC
2-64 OR .086-64	UNF
3-48 OR .099-48	UNC
3-56 OR .099-56	UNF
4-40 OR .112-40	UNC
4-48 OR .112-48	UNF
5-40 OR .125-40	UNC
5-44 OR .125-44	UNF
6-32 OR .138-32	UNC
6-40 OR .138-40	UNF
8-32 OR .164-32	UNC
8-36 OR .164-36	UNF
10-24 OR .190-24	UNC
10-28 OR .190-28	UNS
10-32 OR .190-32	UNF
10-36 OR .190-36	UNS
10-40 OR .190-40	UNS
10-48 OR .190-48	UNS
10-56 OR .190-56	UNS
12-24 OR .216-24	UNC
12-28 OR .216-28	UNF
12-32 OR .216-32	UNEF
12-36 OR .216-36	UNS
12-40 OR .216-40	UNS
12-48 OR .216-48	UNS
12-56 OR .216-56	UNS
1/4-20 OR .250-20	UNC
1/4-24 OR .250-24	UNS
1/4-27 OR .250-27	UNS
1/4-28 OR .250-28	UNF
1/4-32 OR .250-32	UNEF
1/4-36 OR .250-36	UNS
1/4-40 OR .250-40	UNS
1/4-48 OR .250-48	UNS
1/4-56 OR .250-56	UNS
5/16-18 OR .3125-18	UNC
5/16-20 OR .3125-20	UN

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
5/16-24 OR .3125-24	UNF
5/16-27 OR .3125-27	UNS
5/16-28 OR .3125-28	UN
5/16-32 OR .3125-32	UNEF
5/16-36 OR .3125-36	UNS
5/16-40 OR .3125-40	UNS
5/16-48 OR .3125-48	UNS
3/8-16 OR .375-16	UNC
3/8-18 OR .375-18	UNS
3/8-20 OR .375-20	UN
3/8-24 OR .375-24	UNF
3/8-27 OR .375-27	UNS
3/8-28 OR .375-28	UN
3/8-32 OR .375-32	UNEF
3/8-36 OR .375-36	UNS
3/8-40 OR .375-40	UNS
.390-27	UNS
7/16-14 OR .4375-14	UNC
7/16-16 OR .4375-16	UN
7/16-18 OR .4375-18	UNS
7/16-20 OR .4375-20	UNF
7/16-24 OR .4375-24	UNS
7/16-27 OR .4375-27	UNS
7/16-28 OR .4375-28	UNEF
7/16-32 OR .4375-32	UN
7/16-36 OR .4375-36	UNS
7/16-40 OR .4375-40	UNS
1/2-12 OR .500-12	UNS
1/2-13 OR .500-13	UNC
1/2-14 OR .500-14	UNS
1/2-16 OR .500-16	UN
1/2-18 OR .500-18	UNS
1/2-20 OR .500-20	UNF
1/2-24 OR .500-24	UNS
1/2-27 OR .500-27	UNS
1/2-28 OR .500-28	UNEF
1/2-32 OR .500-32	UN
1/2-36 OR .500-36	UNS
1/2-40 OR .500-40	UNS
9/16-12 OR .5625-12	UNC
9/16-14 OR .5625-14	UNS
9/16-16 OR .5625-16	UN
9/16-18 OR .5625-18	UNF
9/16-20 OR .5625-20	UN

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
9/16-24 OR .5625-24	UNEF
9/16-27 OR .5625-27	UNS
9/16-28 OR .5625-28	UN
9/16-32 OR .5625-32	UN
9/16-36 OR .5625-36	UNS
9/16-40 OR .5625-40	UNS
5/8-11 OR .625-11	UNC
5/8-12 OR .625-12	UN
5/8-14 OR .625-14	UNS
5/8-16 OR .625-16	UN
5/8-18 OR .625-18	UNF
5/8-24 OR .625-24	UNEF
5/8-27 OR .625-27	UNS
5/8-28 OR .625-28	UN
5/8-32 OR .625-32	UN
5/8-36 OR .625-36	UNS
11/16-12 OR .6875-12	UN
11/16-16 OR .6875-16	UN
11/16-20 OR .6875-20	UN
11/16-24 OR .6875-24	UNEF
11/16-28 OR .6875-28	UN
11/16-32 OR .6875-32	UN
3/4-10 OR .750-10	UNC
3/4-12 OR .750-12	UN
3/4-14 OR .750-14	UNS
3/4-16 OR .750-16	UNF
3/4-18 OR .750-18	UNS
3/4-20 OR .750-20	UNEF
3/4-24 OR .750-24	UNS
3/4-27 OR .750-27	UNS
3/4-28 OR .750-28	UN
3/4-32 OR .750-32	UN
3/4-36 OR .750-36	UNS
3/4-40 OR .750-40	UNS
13/16-12 OR .8125-12	UN
13/16-16 OR .8125-16	UN
13/16-20 OR .8125-20	UNEF
13/16-28 OR .8125-28	UN
13/16-32 OR .8125-32	UN
7/8-9 OR .875-9	UNC
7/8-10 OR .875-10	UNS
7/8-12 OR .875-12	UN
7/8-14 OR .875-14	UNF
7/8-16 OR .875-16	UN

**FIIG A135**  
**APPENDIX C**

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
7/8-18 OR .875-18	UNS
7/8-20 OR .875-20	UNEF
7/8-24 OR .875-24	UNS
7/8-27 OR .875-27	UNS
7/8-28 OR .875-28	UN
7/8-32 OR .875-32	UN
7/8-36 OR .875-36	UNS
7/8-40 OR .875-40	UNS
15/16-12 OR .9375-12	UN
15/16-16 OR .9375-16	UN
15/16-20 OR .9375-20	UNEF
15/16-28 OR .9375-28	UN
15/16-32 OR .9375-32	UN
1-8 OR 1.000-8	UNC
1-10 OR 1.000-10	UNS
1-12 OR 1.000-12	UNF
1-14 OR 1.000-14	UNS
1-16 OR 1.000-16	UN
1-18 OR 1.000-18	UNS
1-20 OR 1.000-20	UNEF
1-24 OR 1.000-24	UNS
1-27 OR 1.000-27	UNS
1-28 OR 1.000-28	UN
1-32 OR 1.000-32	UN
1-36 OR 1.000-36	UNS
1-40 OR 1.000-40	UNS
1 1/16-8 OR 1.0625-8	UN
1 1/16-12 OR 1.0625-12	UN
1 1/16-16 OR 1.0625-16	UN
1 1/16-18 OR 1.0625-18	UNEF
1 1/16-20 OR 1.0625-20	UN
1 1/16-28 OR 1.0625-28	UN
1 1/8-7 OR 1.125-7	UNC
1 1/8-8 OR 1.125-8	UN
1 1/8-10 OR 1.125-10	UNS
1 1/8-12 OR 1.125-12	UNF
1 1/8-14 OR 1.125-14	UNS
1 1/8-16 OR 1.125-16	UN
1 1/8-18 OR 1.125-18	UNEF
1 1/8-20 OR 1.125-20	UN
1 1/8-24 OR 1.125-24	UNS
1 1/8-28 OR 1.125-28	UN
1 3/16-8 OR 1.188-8	UN
1 3/16-12 OR 1.188-12	UN

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
1 3/16-16 OR 1.188-16	UN
1 3/16-18 OR 1.188-18	UNEF
1 3/16-20 OR 1.188-20	UN
1 3/16-28 OR 1.188-28	UN
1 1/4-7 OR 1.250-7	UNC
1 1/4-8 OR 1.250-8	UN
1 1/4-10 OR 1.250-10	UNS
1 1/4-12 OR 1.250-12	UNF
1 1/4-14 OR 1.250-14	UNS
1 1/4-16 OR 1.250-16	UN
1 1/4-18 OR 1.250-18	UNEF
1 1/4-20 OR 1.250-20	UN
1 1/4-24 OR 1.250-24	UNS
1 1/4-28 OR 1.250-28	UN
1 5/16-8 OR 1.312-8	UN
1 5/16-12 OR 1.312-12	UN
1 5/16-16 OR 1.312-16	UN
1 5/16-18 OR 1.312-18	UNEF
1 5/16-20 OR 1.312-20	UN
1 5/16-28 OR 1.312-28	UN
1 3/8-6 OR 1.375-6	UNC
1 3/8-8 OR 1.375-8	UN
1 3/8-10 OR 1.375-10	UNS
1 3/8-12 OR 1.375-12	UNF
1 3/8-14 OR 1.375-14	UNS
1 3/8-16 OR 1.375-16	UN
1 3/8-18 OR 1.375-18	UNEF
1 3/8-20 OR 1.375-20	UN
1 3/8-24 OR 1.375-24	UNS
1 3/8-28 OR 1.375-28	UN
1 7/16-6 OR 1.4375-6	UN
1 7/16-8 OR 1.438-8	UN
1 7/16-12 OR 1.438-12	UN
1 7/16-16 OR 1.438-16	UN
1 7/16-18 OR 1.438-18	UNEF
1 7/16-20 OR 1.438-20	UN
1 7/16-28 OR 1.438-28	UN
1 1/2-6 OR 1.500-6	UNC
1 1/2-8 OR 1.500-8	UN
1 1/2-10 OR 1.500-10	UNS
1 1/2-12 OR 1.500-12	UNF
1 1/2-14 OR 1.500-14	UNS
1 1/2-16 OR 1.500-16	UN
1 1/2-18 OR 1.500-18	UNEF

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
1 1/2-20 OR 1.500-20	UN
1 1/2-24 OR 1.500-24	UNS
1 1/2-28 OR 1.500-28	UN
1 9/16-6 OR 1.562-6	UN
1 9/16-8 OR 1.562-8	UN
1 9/16-12 OR 1.562-12	UN
1 9/16-16 OR 1.562-16	UN
1 9/16-18 OR 1.562-18	UNEF
1 9/16-20 OR 1.562-20	UN
1 5/8-6 OR 1.625-6	UN
1 5/8-8 OR 1.625-8	UN
1 5/8-10 OR 1.625-10	UNS
1 5/8-12 OR 1.625-12	UN
1 5/8-14 OR 1.625-14	UNS
1 5/8-16 OR 1.625-16	UN
1 5/8-18 OR 1.625-18	UNEF
1 5/8-20 OR 1.625-20	UN
1 5/8-24 OR 1.625-24	UNS
1 11/16-6 OR 1.688-6	UN
1 11/16-8 OR 1.688-8	UN
1 11/16-12 OR 1.688-12	UN
1 11/16-16 OR 1.688-16	UN
1 11/16-18 OR 1.688-18	UNEF
1 11/16-20 OR 1.688-20	UN
1 3/4-5 OR 1.750-5	UNC
1 3/4-6 OR 1.750-6	UN
1 3/4-8 OR 1.750-8	UN
1 3/4-10 OR 1.750-10	UNS
1 3/4-12 OR 1.750-12	UN
1 3/4-14 OR 1.750-14	UNS
1 3/4-16 OR 1.750-16	UN
1 3/4-20 OR 1.750-20	UN
1 13/16-6 OR 1.812-6	UN
1 13/16-8 OR 1.812-8	UN
1 13/16-12 OR 1.812-12	UN
1 13/16-16 OR 1.812-16	UN
1 13/16-20 OR 1.812-20	UN
1 7/8-6 OR 1.875-6	UN
1 7/8-8 OR 1.875-8	UN
1 7/8-10 OR 1.875-10	UNS
1 7/8-12 OR 1.875-12	UN
1 7/8-14 OR 1.875-14	UNS
1 7/8-16 OR 1.875-16	UN
1 7/8-18 OR 1.875-18	UNS

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
1 7/8-20 OR 1.875-20	UN
1 15/16-6 OR 1.938-6	UN
1 15/16-8 OR 1.938-8	UN
1 15/16-12 OR 1.938-12	UN
1 15/16-16 OR 1.938-16	UN
1 15/16-20 OR 1.938-20	UN
2-4 1/2 OR 2.000-4.5	UNC
2-6 OR 2.000-6	UN
2-8 OR 2.000-8	UN
2-10 OR 2.000-10	UN
2-12 OR 2.000-12	UN
2-14 OR 2.000-14	UNS
2-16 OR 2.000-16	UN
2-18 OR 2.000-18	UNS
2-20 OR 2.000-20	UN
2 1/16-16 OR 2.062-16	UNS
2 1/8-6 OR 2.125-6	UN
2 1/8-8 OR 2.125-8	UN
2 1/8-12 OR 2.125-12	UN
2 1/8-16 OR 2.125-16	UN
2 1/8-20 OR 2.125-20	UN
2 3/16-16 OR 2.188-16	UNS
2 1/4-4 1/2 OR 2.250-4.5	UNC
2 1/4-6 OR 2.250-6	UN
2 1/4-8 OR 2.250-8	UN
2 1/4-10 OR 2.250-10	UNS
2 1/4-12 OR 2.250-12	UN
2 1/4-14 OR 2.250-14	UN
2 1/4-16 OR 2.250-16	UN
2 1/4-18 OR 2.250-18	UNS
2 1/4-20 OR 2.250-20	UN
2 5/16-16 OR 2.312-16	UNS
2 3/8-6 OR 2.375-6	UN
2 3/8-8 OR 2.375-8	UN
2 3/8-12 OR 2.375-12	UN
2 3/8-16 OR 2.375-16	UN
2 3/8-20 OR 2.375-20	UN
2 7/16-16 OR 2.438-16	UNS
2 1/2-4 OR 2.500-4	UNC
2 1/2-6 OR 2.500-6	UN
2 1/2-8 OR 2.500-8	UN
2 1/2-10 OR 2.500-10	UNS
2 1/2-12 OR 2.500-12	UN
2 1/2-14 OR 2.500-14	UNS

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
2 1/2-16 OR 2.500-16	UN
2 1/2-18 OR 2.500-18	UNS
2 1/2-20 OR 2.500-20	UN
2 5/8-6 OR 2.625-6	UN
2 5/8-8 OR 2.625-8	UN
2 5/8-12 OR 2.625-12	UN
2 5/8-16 OR 2.625-16	UN
2 5/8-20 OR 2.625-20	UN
2 3/4-4 OR 2.750-4	UNC
2 3/4-6 OR 2.750-6	UN
2 3/4-8 OR 2.750-8	UN
2 3/4-10 OR 2.750-10	UNS
2 3/4-12 OR 2.750-12	UN
2 3/4-14 OR 2.750-14	UNS
2 3/4-16 OR 2.750-16	UN
2 3/4-18 OR 2.750-18	UNS
2 3/4-20 OR 2.750-20	UN
2 7/8-6 OR 2.875-6	UN
2 7/8-8 OR 2.875-8	UN
2 7/8-12 OR 2.875-12	UN
2 7/8-16 OR 2.875-16	UN
2 7/8-20 OR 2.875-20	UN
3-4 OR 3.000-4	UNC
3-6 OR 3.000-6	UN
3-8 OR 3.000-8	UN
3-10 OR 3.000-10	UNS
3-12 OR 3.000-12	UN
3-14 OR 3.000-14	UNS
3-16 OR 3.000-16	UN
3-18 OR 3.000-18	UNS
3-20 OR 3.000-20	UN
3 1/8-6 OR 3.125-6	UN
3 1/8-8 OR 3.125-8	UN
3 1/8-12 OR 3.125-12	UN
3 1/8-16 OR 3.125-16	UN
3 1/4-4 OR 3.250-4	UNC
3 1/4-6 OR 3.250-6	UN
3 1/4-8 OR 3.250-8	UN
3 1/4-10 OR 3.250-10	UNS
3 1/4-12 OR 3.250-12	UN
3 1/4-14 OR 3.250-14	UNS
3 1/4-16 OR 3.250-16	UN
3 1/4-18 OR 3.250-18	UNS
3 3/8-6 OR 3.375-6	UN

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
3 3/8-8 OR 3.375-8	UN
3 3/8-12 OR 3.375-12	UN
3 3/8-16 OR 3.375-16	UN
3 1/2-4 OR 3.500-4	UNC
3 1/2-6 OR 3.500-6	UN
3 1/2-8 OR 3.500-8	UN
3 1/2-10 OR 3.500-10	UNS
3 1/2-12 OR 3.500-12	UN
3 1/2-14 OR 3.500-14	UNS
3 1/2-16 OR 3.500-16	UN
3 1/2-18 OR 3.500-18	UNS
3 5/8-6 OR 3.625-6	UN
3 5/8-8 OR 3.625-8	UN
3 5/8-12 OR 3.625-12	UN
3 5/8-16 OR 3.625-16	UN
3 3/4-4 OR 3.750-4	UNC
3 3/4-6 OR 3.750-6	UN
3 3/4-8 OR 3.750-8	UN
3 3/4-10 OR 3.750-10	UNS
3 3/4-12 OR 3.750-12	UN
3 3/4-14 OR 3.750-14	UNS
3 3/4-16 OR 3.750-16	UN
3 3/4-18 OR 3.750-18	UNS
3 7/8-6 OR 3.875-6	UN
3 7/8-8 OR 3.875-8	UN
3 7/8-12 OR 3.875-12	UN
3 7/8-16 OR 3.875-16	UN
4-4 OR 4.000-4	UNC
4-6 OR 4.000-6	UN
4-8 OR 4.000-8	UN
4-10 OR 4.000-10	UNS
4-12 OR 4.000-12	UN
4-14 OR 4.000-14	UNS
4-16 OR 4.000-16	UN
4 1/8-4 OR 4.125-4	UN
4 1/8-12 OR 4.125-12	UN
4 1/8-16 OR 4.125-16	UN
4 1/4-4 OR 4.250-4	UN
4 1/4-6 OR 4.250-6	UN
4 1/4-10 OR 4.250-10	UNS
4 1/4-12 OR 4.250-12	UN
4 1/4-14 OR 4.250-14	UNS
4 1/4-16 OR 4.250-16	UN
4 3/8-6 OR 4.375-6	UN

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
4 3/8-12 OR 4.375-12	UN
4 3/8-16 OR 4.375-16	UN
4 1/2-4 OR 4.500-4	UN
4 1/2-6 OR 4.500-6	UN
4 1/2-10 OR 4.500-10	UNS
4 1/2-12 OR 4.500-12	UN
4 1/2-14 OR 4.500-14	UNS
4 1/2-16 OR 4.500-16	UN
4 5/8-6 OR 4.625-6	UN
4 5/8-12 OR 4.625-12	UN
4 5/8-16 OR 4.625-16	UN
4 3/4-4 OR 4.750-4	UN
4 3/4-6 OR 4.750-6	UN
4 3/4-10 OR 4.750-10	UNS
4 3/4-12 OR 4.750-12	UN
4 3/4-14 OR 4.750-14	UNS
4 3/4-16 OR 4.750-16	UN
4 7/8-6 OR 4.875-6	UN
4 7/8-12 OR 4.875-12	UN
4 7/8-16 OR 4.875-16	UN
5-4 OR 5.000-4	UN
5-8 OR 5.000-8	UN
5-10 OR 5.000-10	UNS
5-12 OR 5.000-12	UN
5-14 OR 5.000-14	UNS
5-16 OR 5.000-16	UN
5 1/8-12 OR 5.125-12	UN
5 1/8-16 OR 5.125-16	UN
5 1/4-4 OR 5.250-4	UN
5 1/4-10 OR 5.250-10	UNS
5 1/4-12 OR 5.250-12	UN
5 1/4-14 OR 5.250-14	UNS
5 1/4-16 OR 5.250-16	UN
5 3/8-12 OR 5.375-12	UN
5 3/8-16 OR 5.375-16	UN
5 1/2-4 OR 5.500-4	UN
5 1/2-10 OR 5.500-10	UNS
5 1/2-12 OR 5.500-12	UN
5 1/2-14 OR 5.500-14	UNS
5 1/2-16 OR 5.500-16	UN
5 5/8-12 OR 5.625-12	UN
5 3/4-4 OR 5.750-4	UN
5 5/8-16 OR 5.625-16	UN
5 3/4-4 OR 5.750-4	UN

FIIG A135  
APPENDIX C

<u>Nominal Size and Threads Per Inch</u>	<u>Thread Series</u>
5 3/4-10 OR 5.750-10	UNS
5 3/4-12 OR 5.750-12	UN
5 3/4-14 OR 5.750-14	UNS
5 3/4-16 OR 5.750-16	UN
5 7/8-12 OR 5.875-12	UN
5 7/8-16 OR 5.875-16	UN
6-4 OR 6.000-4	UN
6-10 OR 6.000-10	UNS
6-12 OR 6.000-12	UN
6-14 OR 6.000-14	UNS
6-16 OR 6.000-16	UN

OUNCE TO DECIMAL OF A POUND CONVERSION CHART

<u>OUNCES</u>	<u>POUNDS</u>
1	0.062
2	0.125
3	0.188
4	0.250
5	0.312
6	0.375
7	0.438
8	0.500
9	0.562
10	0.625
11	0.688
12	0.750
13	0.812
14	0.875
15	0.938
16	1.000

## FIIG Change List

FIIG Change List, Effective: December 4, 2009.

DELETED SAC CODING FROM MRC's CNQR, CNQS, CNQT, CNQW, CNQX, CNQY, CNQZ and Change to AND/OR Coding.